BONNOT
CLAY MACHINERY

THE BONNOT COMPANY
CANTON OHIO U. S. A.

BONNOT
CLAY MACHINERY

CATALOG NO. 18

BRICK MACHINES
AUTOMATIC CUTTING TABLES
REPRESSES DRY PRESS MACHINES
SCREENS PUG MILLS PANS ELEVATORS
ROLLS DRYER CARS TURNTABLES
DIES ETC. ETC.

MANUFACTURED BY

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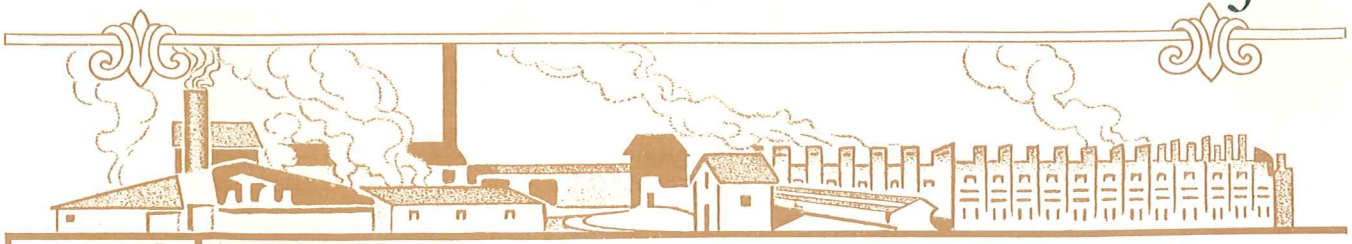
Introductory



THE clay worker of today is demanding machinery of improved type and of greater durability. More attention is now given to the selection of equipment, and its fitness for the work. "Bonnot" machinery has made for itself an enviable reputation among clay workers because of its durability and convenience in operation. The severe service and constant wear to which this class of machinery is subjected, demands the best materials and construction. During the period of twenty years that we have been building clay working machinery, it has been our constant endeavor to produce the highest possible grade.

The designs shown in this catalog are modern in every respect, and embody many improvements. In the No. 11 Auger Brick Machine and the "Canton Special" combined, we have the largest and strongest brick machines of their class. In the designing of our machinery, we have aimed to distribute the material to meet the requirements of strength and durability, also having in mind convenience in making renewal of wearing parts. In arranging our catalog, we have omitted such designs as have been replaced by those of more modern type, knowing that the clay worker of today is interested only in machinery of the latest and most improved pattern.

COMBINED BRICK MACHINE AND PUG MILL

TO meet the demand for a combination of brick machine and pug mill, we build machines ranging in capacity from twenty thousand to one hundred and twenty-five thousand brick per day. The largest of these is our "Canton Special" machine which is constructed with all-steel cut gearing, ten-inch and twelve-inch face. This is the most substantial and heaviest brick machine of any description made. Where large capacity is desired with plenty of reserve strength, this machine outclasses all others.

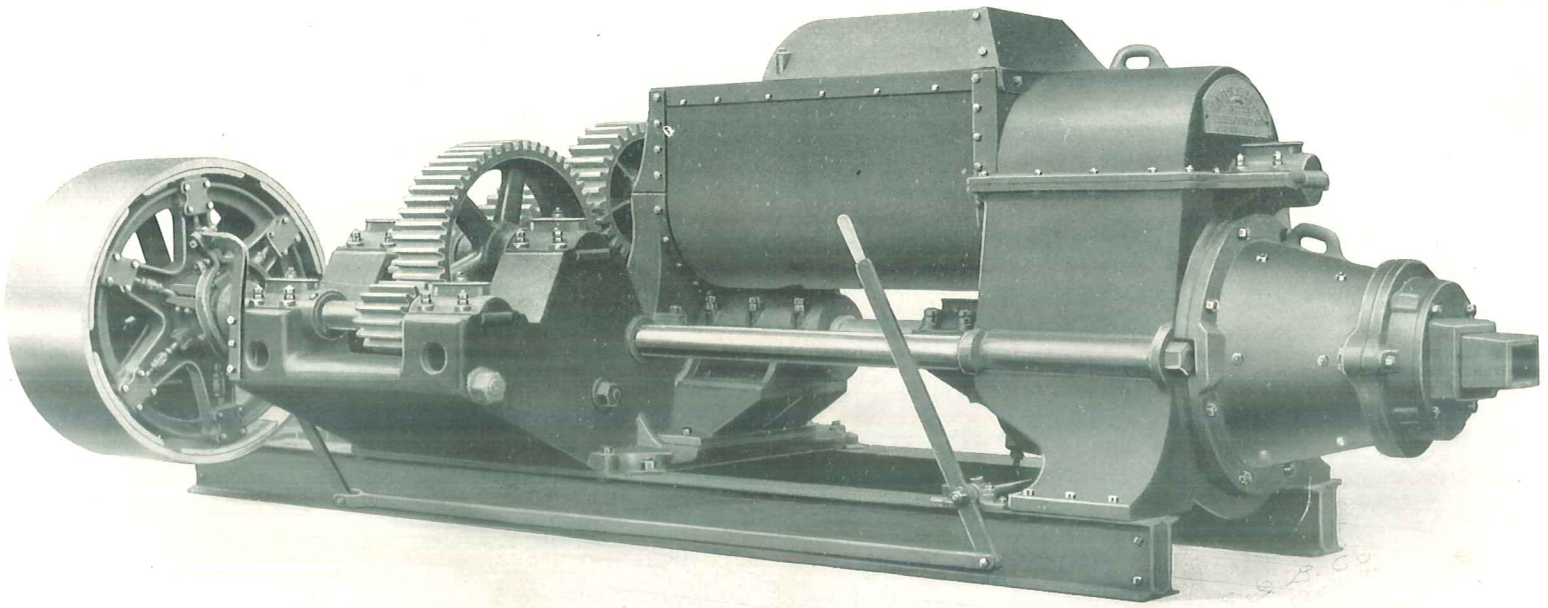
In all of our combined machines we have located the marine thrust bearing in front of the frame where it is accessible without dismantling any other part. Our machines of this combination type have three bearings for the pug mill shaft.

Particular attention has been paid to giving proper clearance in the front of machine where clay discharges from pug mill, and special blades at this point intermesh with the knives on brick machine shaft, thus absolutely preventing any tendency to choke.

All of the machines are mounted on steel beams insuring rigidity and perfect alignment.

BONNOT

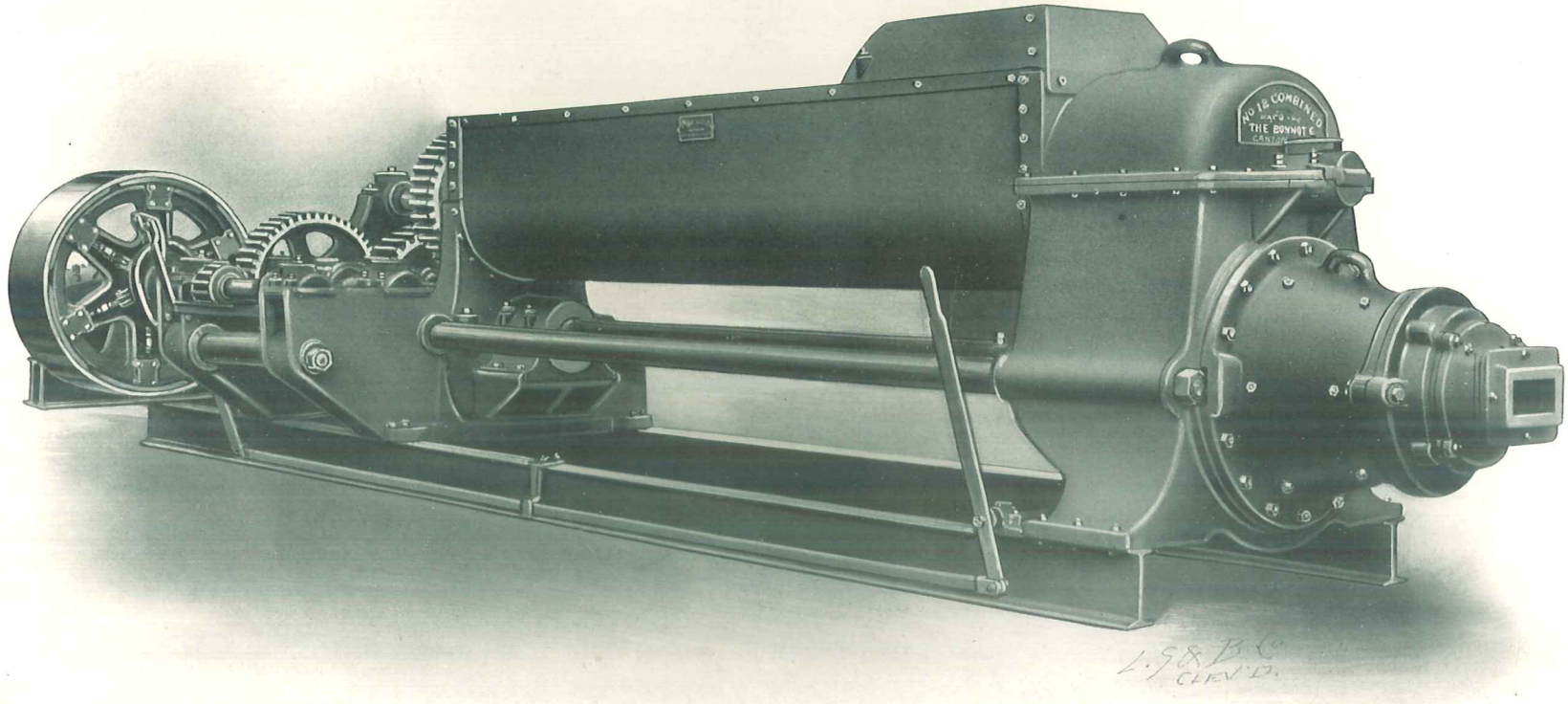
"Canton Special" Brick Machine



Steel cut gearing throughout. Largest and heaviest brick machine made. Main thrust bearing rebabbitted without dismantling. Capacity up to 150,000 bricks per day. Length, with 5-ft. pug mill, 19 ft. 6 in.; width, 10 ft.; height, 6 ft. Six-arm friction clutch pulley 48 x 20 in. Speed, 300 R. P. M.

BONNOT

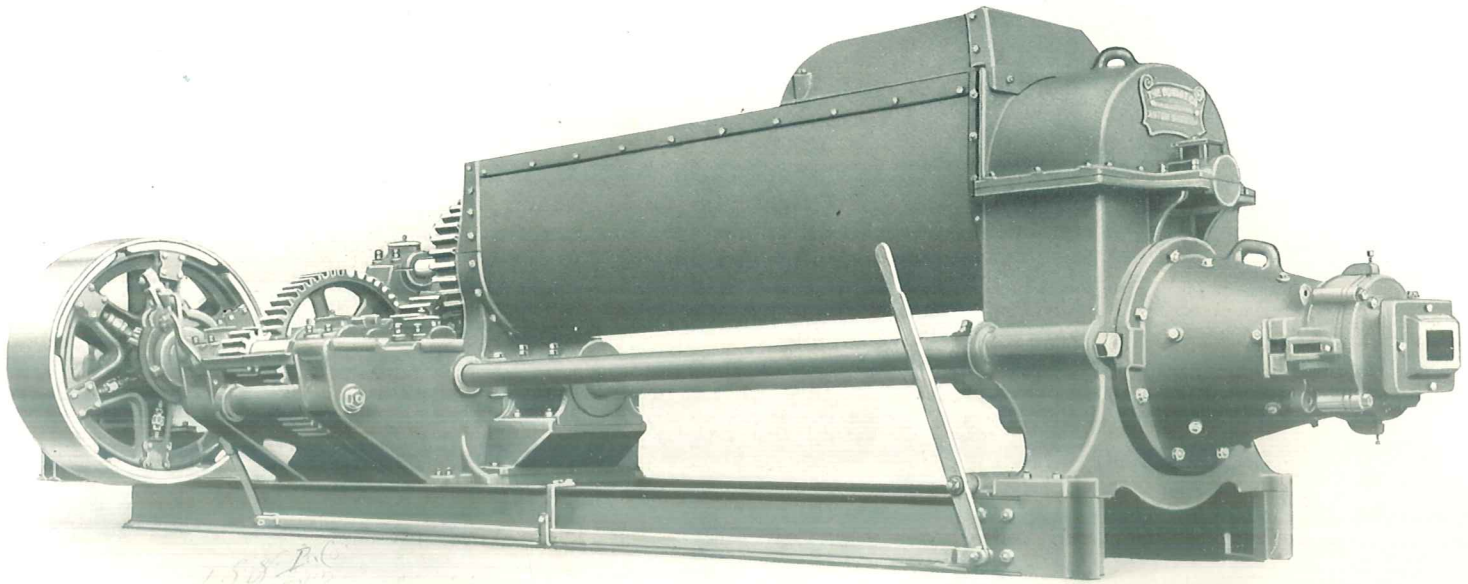
Combined Brick Machine
and Pug Mill No. 12



All gears and pinions of cast steel. Self-contained on steel I-beams. Interlocking hubs in pug mill. Main shaft rebabbitted without dismantling. Capacity, 100,000 to 125,000 brick in 10 hours. Length of machine with 12-ft. pug mill, 24 ft.; width, 8 ft. 6 in.; height to top of hopper 6 ft. 1½ in. Friction clutch pulley, 48 x 18 in. Six-arm type. Speed, 265 R.P.M.

BONNOT

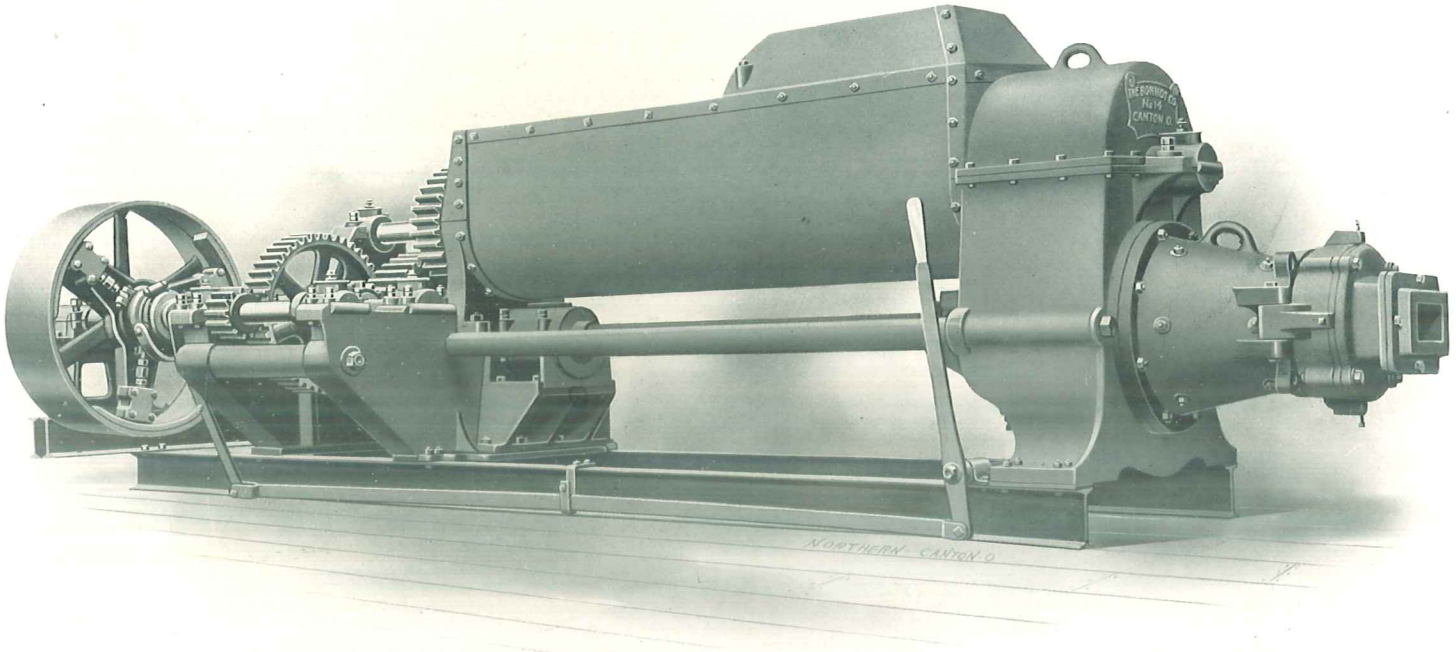
Combined Brick Machine
and Pug Mill No. 6



Steel gears throughout. Self-contained on steel I-beam. Length of pug mill, 5 to 10 ft Interlocking hubs and independent knives. Capacity, 50,000 to 75,000 brick in ten hours.

B O N N O T

Combined Brick Machine
and Pug Mill No. 14



Capacity, 25,000 to 40,000 per day. Length with 8-ft. pug mill, 19 ft. 2 in.; width, 6 ft. 6 in.; height to top of hopper, 4 ft. 10 in. Friction clutch pulley, 40 x 14 in. Speed, 235 R.P.M.

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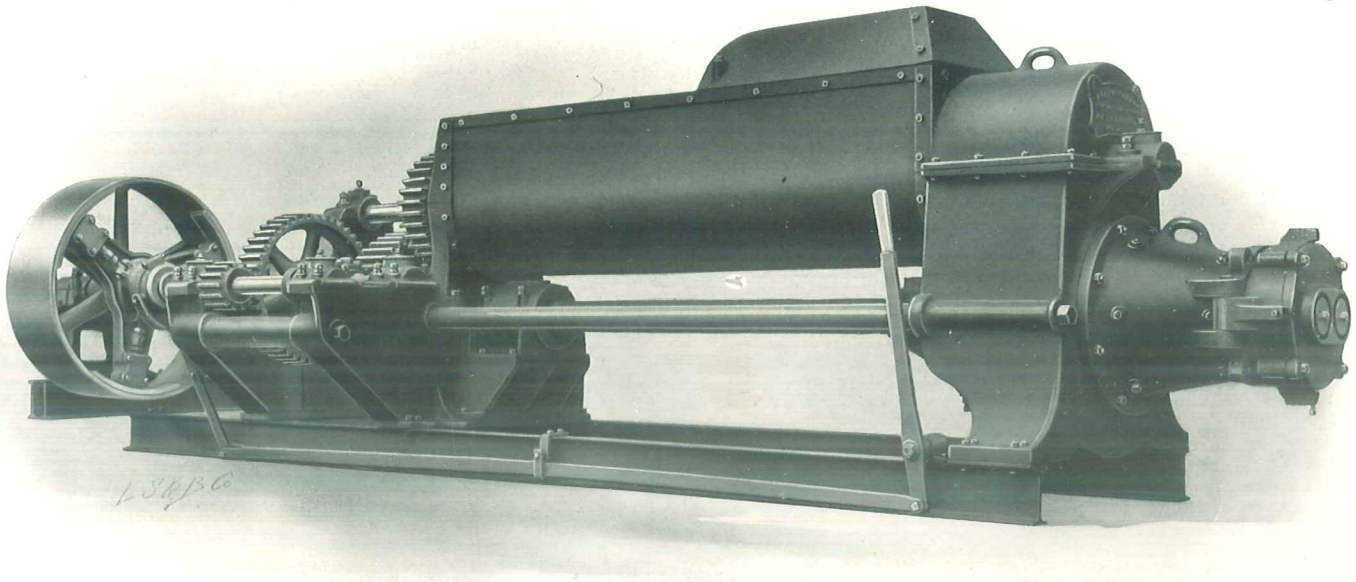
Tile Machine No. 14



AUGER BRICK MACHINE

OUR Auger Brick Machines are mounted on steel beams which extend the entire length including the outboard bearing for pulley shaft. They are designed with special reference to making the various parts accessible. Steel gearing is used throughout on all of our brick machines.

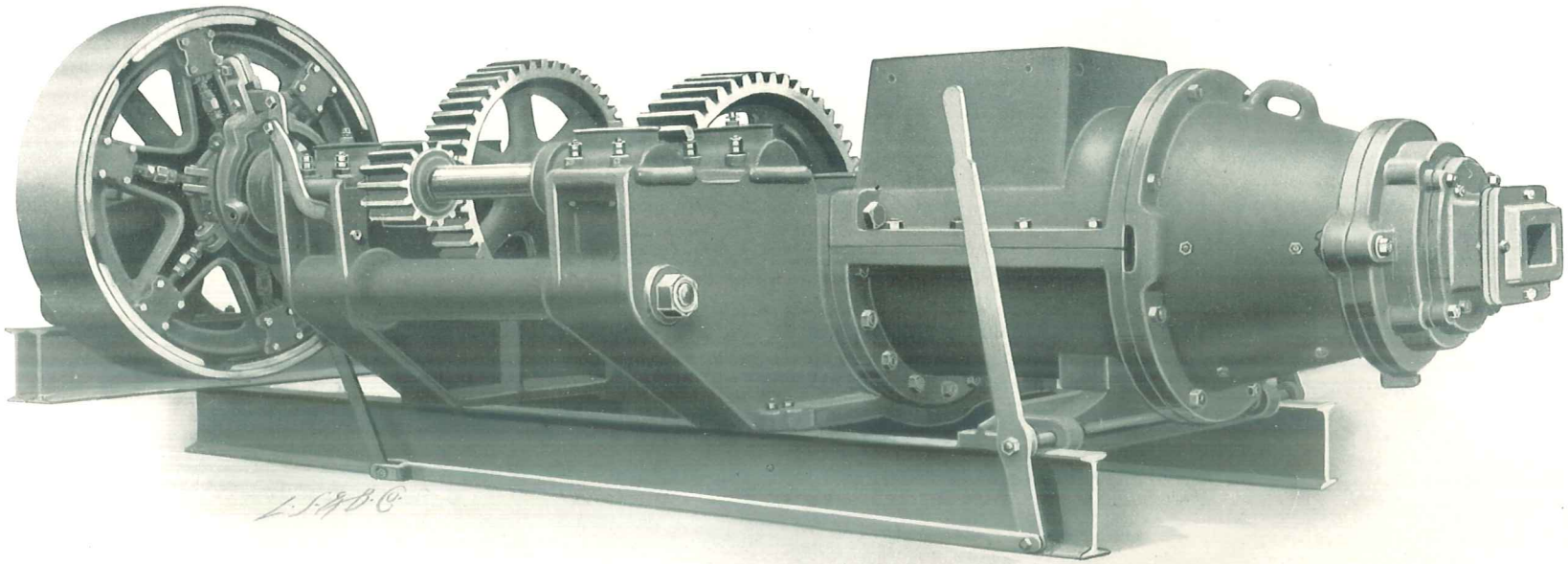
The main thrust bearing is of the marine type and located in the front frame. The location of the thrust at this point eliminates the tendency of frame to pull apart as is the case where thrust is taken at end of shaft, and it also maintains the shaft accurately centered in the auger chamber.

In our brick machines the nozzle is lined with removable liners of hard iron.

Friction clutch pulleys are supplied on all these machines.

BONNOT

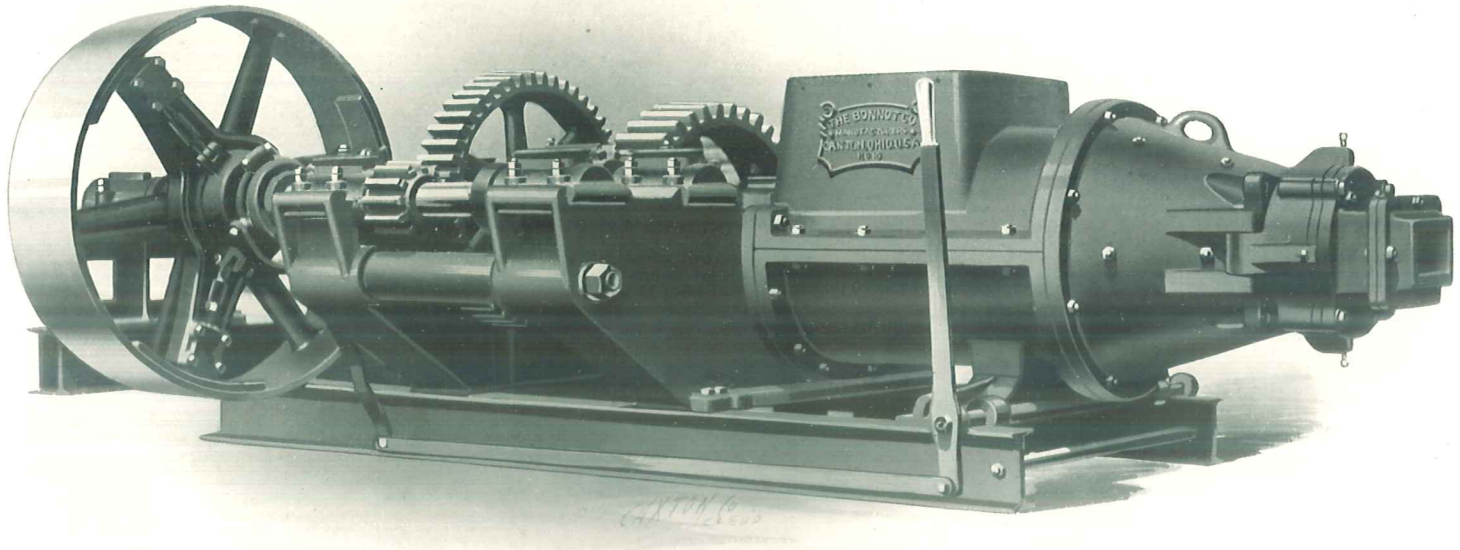
Auger Brick Machine
No. 11



Capacity, 75,000 to 125,000 per day. Length, 15 ft. 7 in.; width, 8 ft. 7 in.; height to top of hopper, 4 ft. 4 in. Friction clutch pulley, 49 x 14 in. Six-arm type. Speed, 265 R.P.M.

B O N N O T

Auger Brick Machine
No. 10



Capacity, 50,000 to 75,000 per day. Length, 13 ft. 2 in.; width, 7 ft. 8 in.; height to top of hopper, 3 ft. 11 in. Friction clutch pulley, 48 x 12 in. Speed, 250 R.P.M.

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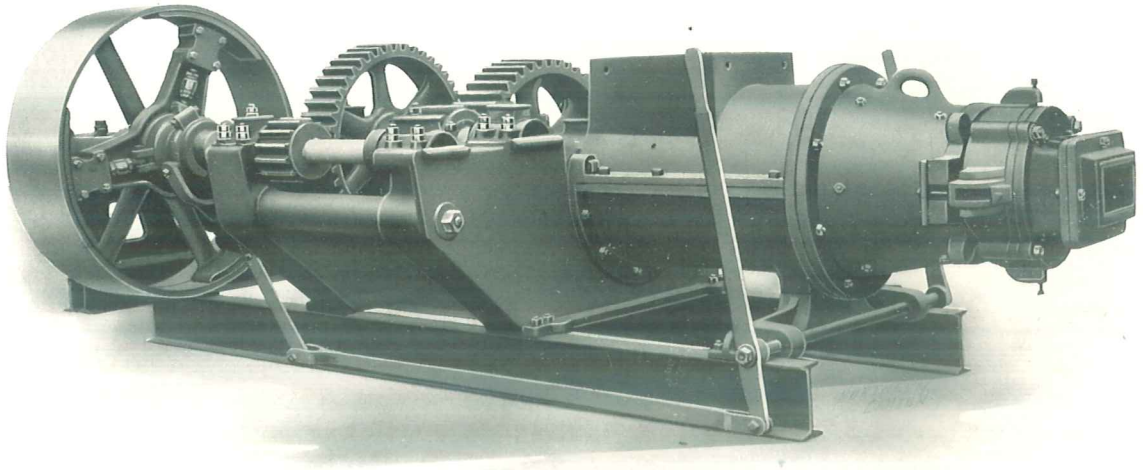
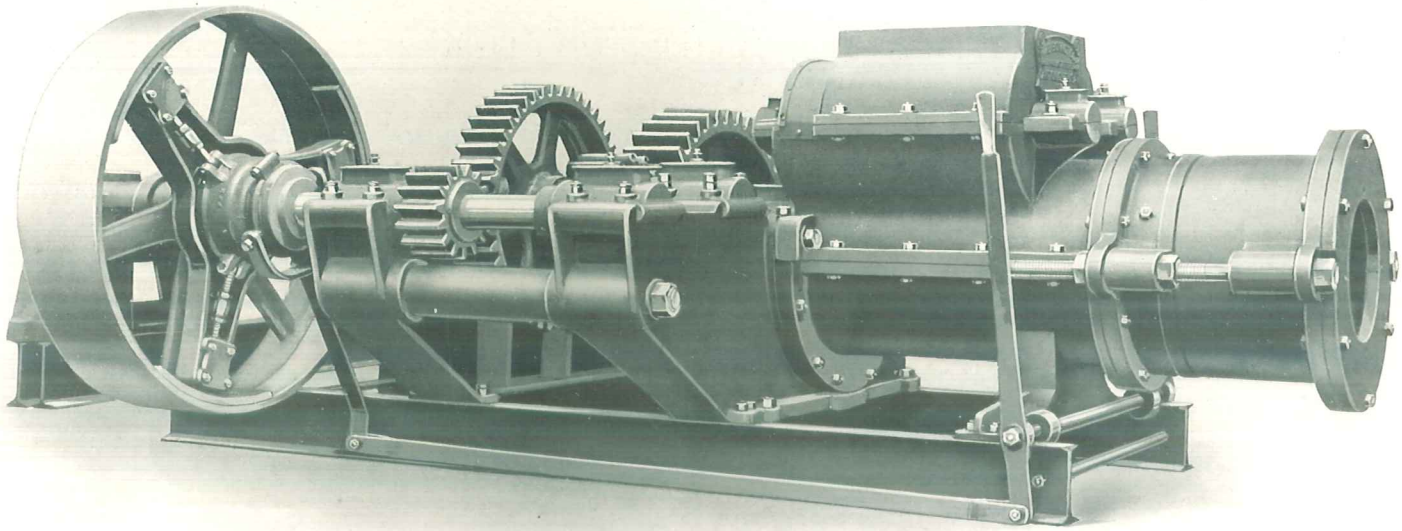
Auger Brick Machine
No. 8



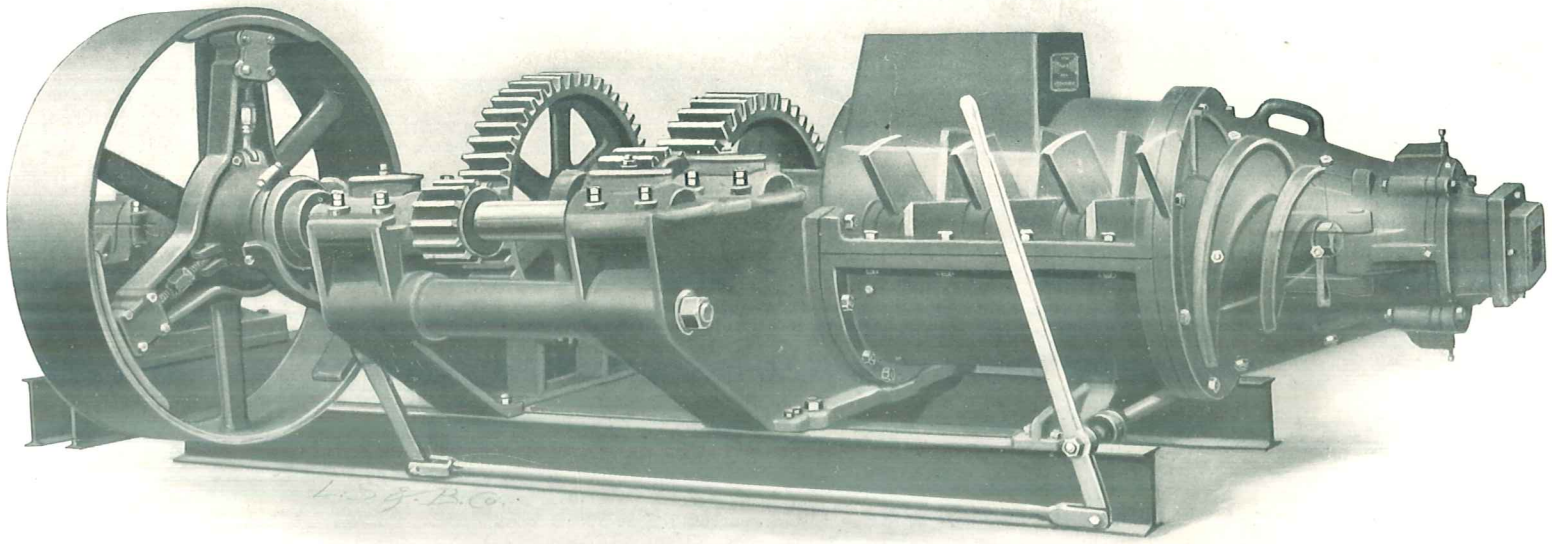
Capacity, 25,000 to 40,000 per day. Length, 11 ft. 10 in.; width, 6 ft. 6 in.; height to top of hopper, 3 ft. 5 in. Friction clutch pulley, 40 x 12 in. Speed, 235 R.P.M.

B O N N O T

Hollow-ware Machine
No. 16½



Arrangement of Knives and Auger



Interior view of Auger Brick Machine showing arrangement of Knives and Auger.

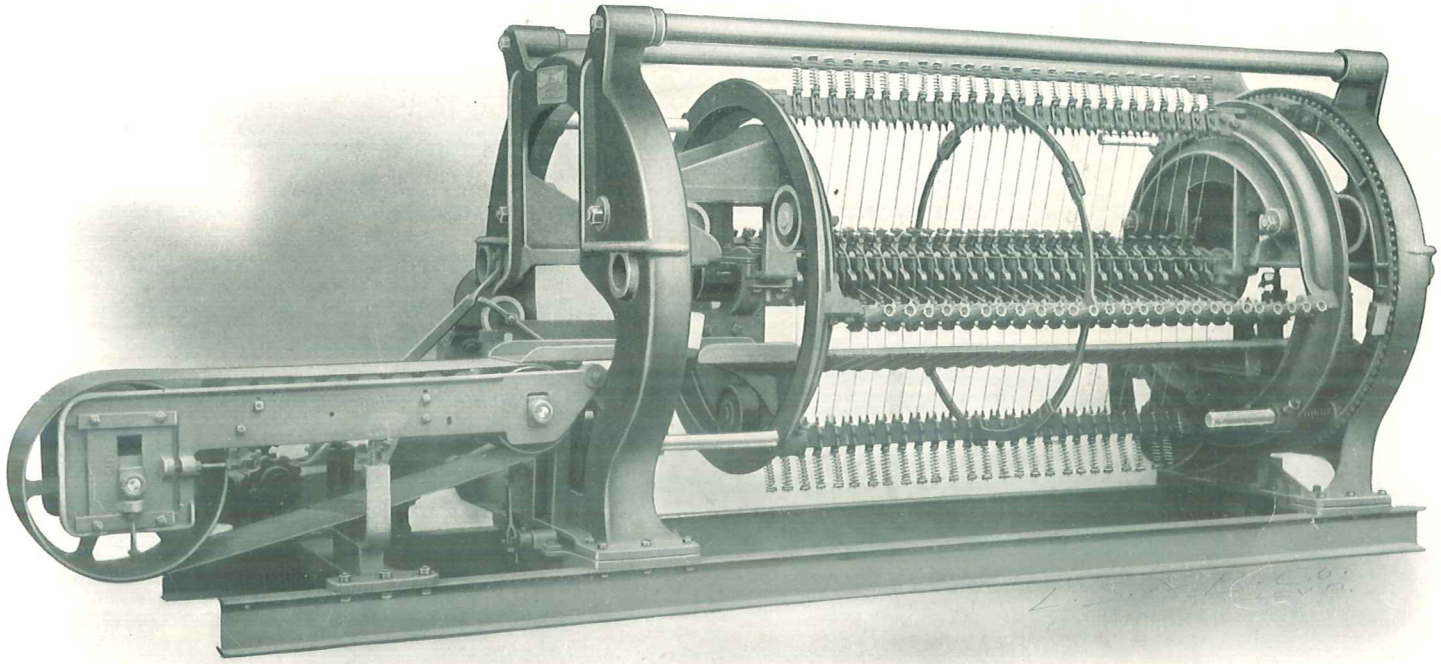
ROTARY AUTOMATIC CUTTING TABLE

THE "Canton" Rotary Automatic Cutter was designed to make a high grade face brick. It possesses some advantages in construction over other tables of this type. Special attention is called to the fact that the cutting frame is placed next to the die of brick machine, thus doing away with any long column of clay, which is a frequent source of trouble. The entire machine is mounted on steel I-beams. The end frames, which are stationary, are securely bolted to the beams and held at top with stretcher. The cutting reel moves in the stationary frame, being carried on tracks and rollers at either end. The driving gears are enclosed in the end frames and impart the motion to cutting reel by means of four shafts placed two at each end. The cutting frame, being thus supported, does away with any track or parts underneath, which are likely to become clogged with dirt. There are four sets of cutting wires. At each revolution of the measuring belt a trip sets in motion independent power by which the cutting is done and cutting frame drawn back in position for making the next cut. Our special wire fasteners make the replacing of wires quite easy while table is in motion.

Floor space required, exclusive of delivery belt, 15 x 6 feet. Capacity up to 100,000 brick in ten hours.

BONNOT

Rotary Automatic
Cutting Table



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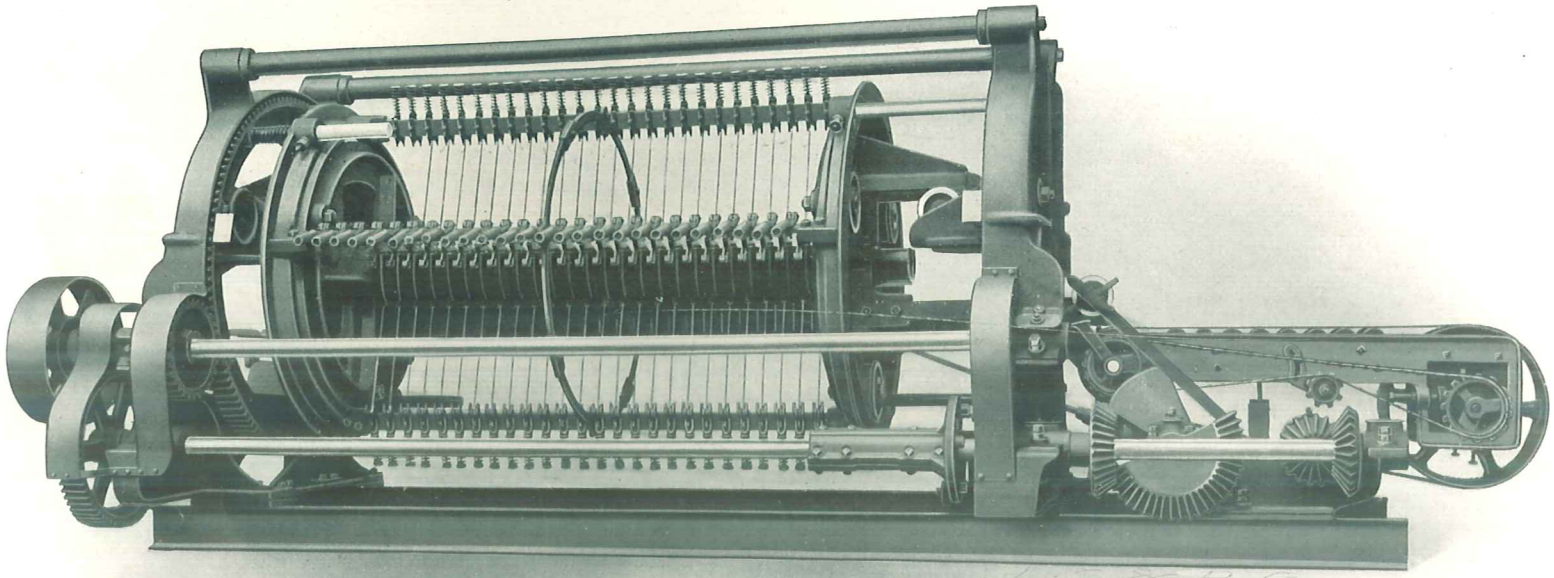
Rotary Automatic
Cutting Table — Gear
Side



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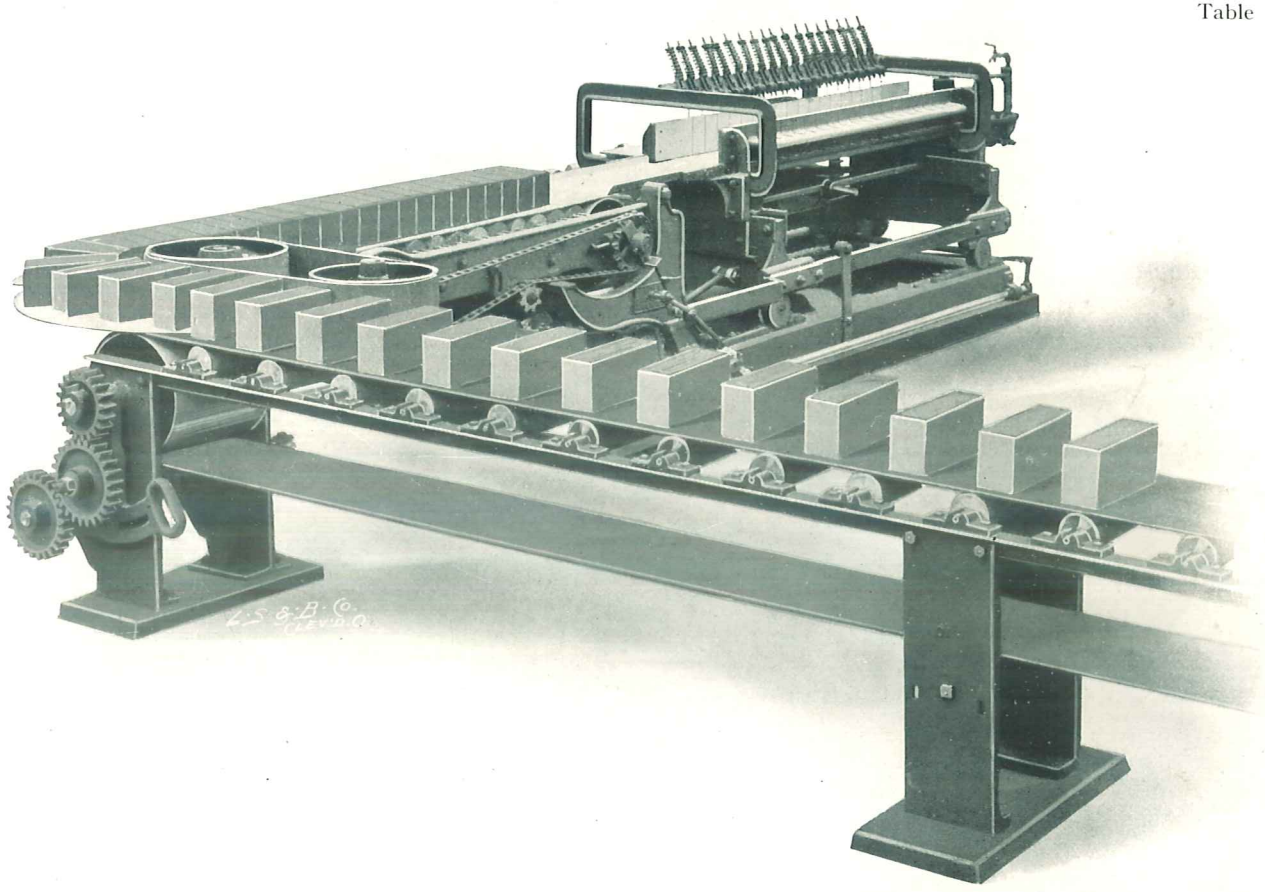
Right Angle Off Carrier
For Automatic Side Cut
Table



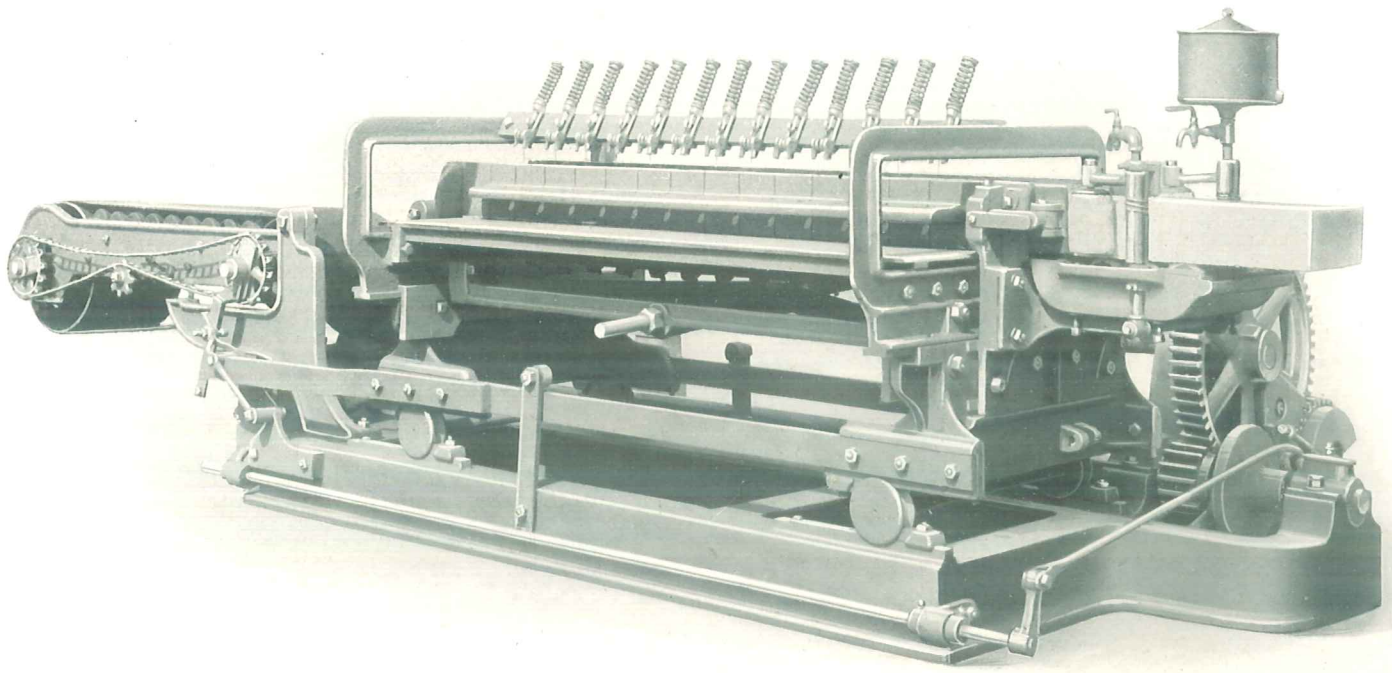
AUTOMATIC SIDE CUT TABLE

THE Automatic Cutter on opposite page is very simple, durable and satisfactory to operate. The cutting frame is placed close to the die of brick machine, thus doing away with the long column of clay which frequently has a tendency to swell or upset. At each revolution of the measuring belt the trip is raised, which sets the cutting gear in motion and allows the table to move with the column of clay. The cutting and moving back of cutting frame is done entirely by independent power and the only work done by the column of clay is to operate the trip, which sets the power in motion. Table is arranged to cut eighteen standard brick at each movement, thus giving a comparatively slow motion. Oil rolls are provided for lubricating the column of clay as it passes on the table. Cutting wires are short and easily replaced while the table is in motion. The thrust bars and stroke are adjustable to permit of cutting brick from 7 inches to 10½ inches long. The table is substantially made throughout with large bearings carefully fitted and arranged for taking up wear.

Space required, exclusive of delivery belt, 13½ x 6½ feet. Capacity of table, any number up to 100,000 brick in ten hours.

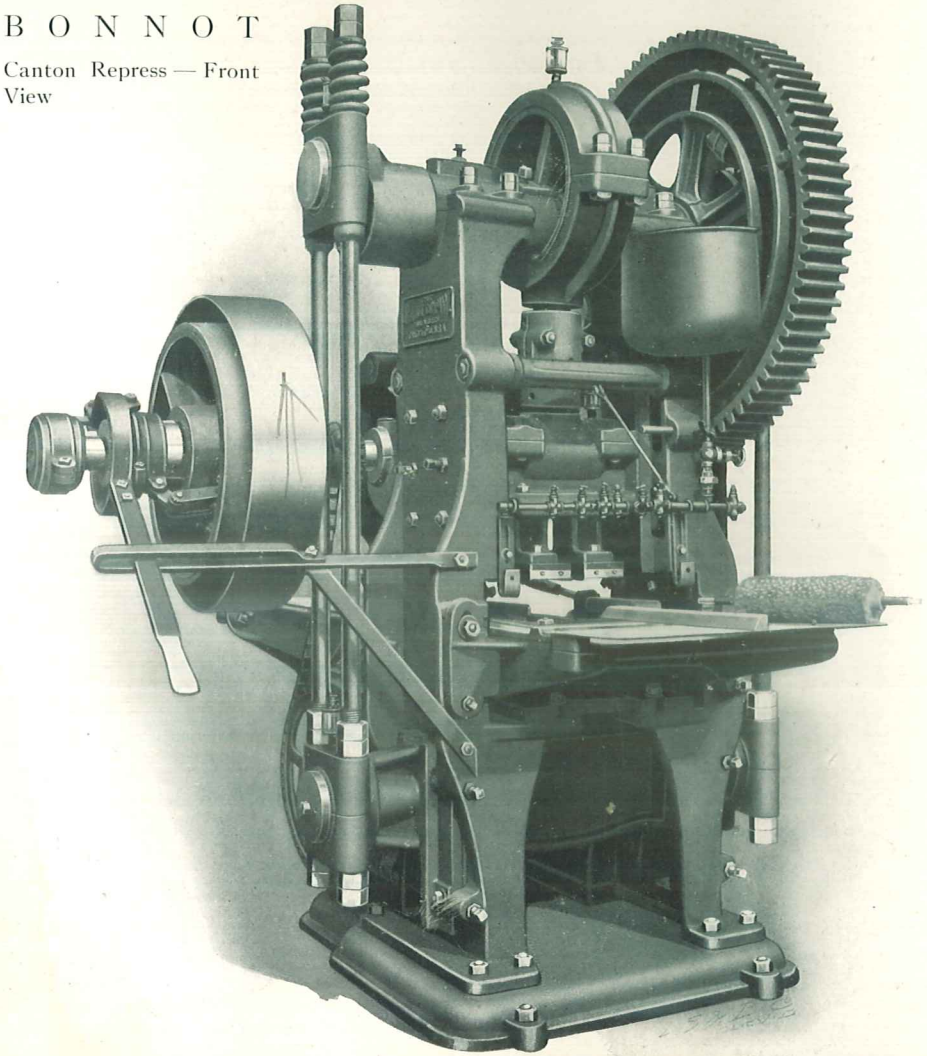
BONNOT

Automatic Side Cut Table



B O N N O T

Canton Repress — Front View



Canton Repress

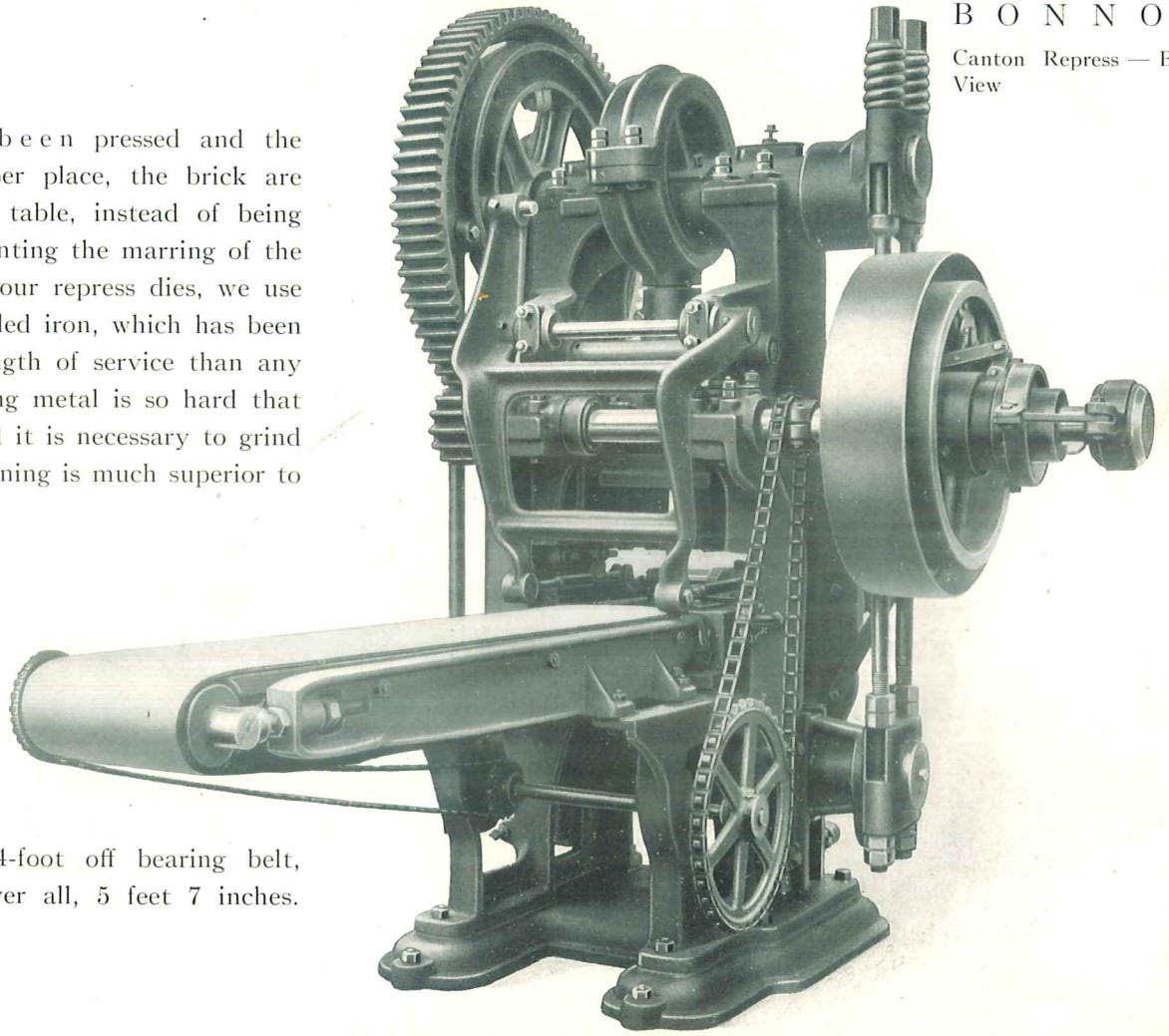
THE Canton Repress is neat and compact in design, and so arranged as to make the wearing parts accessible. All the strain or pressure is taken on the heavy steel side rods, relieved by tempered springs. The pressure is easily and conveniently regulated by right and left nut immediately above the upper crosshead. The motion is continuous, which feature permits of exceptional speed and capacity, and makes the repress free from the jar and jolt so destructive to machinery. The shafts are all very heavy, bearings wide and ample, and all the wearing parts are above the die. The guides for the crossheads are V-shaped and arranged to take up wear. The feeding table is wide and long, and the movement of the pusher is so regulated as to make the work of feeding the brick very easy.

After the brick have been pressed and the plunger raised to its proper place, the brick are laid upon the off bearing table, instead of being shoved upon it, thus preventing the marring of the under surface. In lining our repress dies, we use special quality of hard chilled iron, which has been found to give greater strength of service than any other material. This lining metal is so hard that it cannot be machined, and it is necessary to grind it to size. This style of lining is much superior to any form of steel lining.

Machine is driven with friction clutch pulley 28 inches in diameter, 6-inch face; speed, 130 R.P.M. for 2,400 brick per hour.

Capacity of Repress, 20,000 to 30,000 per day.

Length, with regular 4-foot off bearing belt, 7 feet 3 inches; width over all, 5 feet 7 inches.



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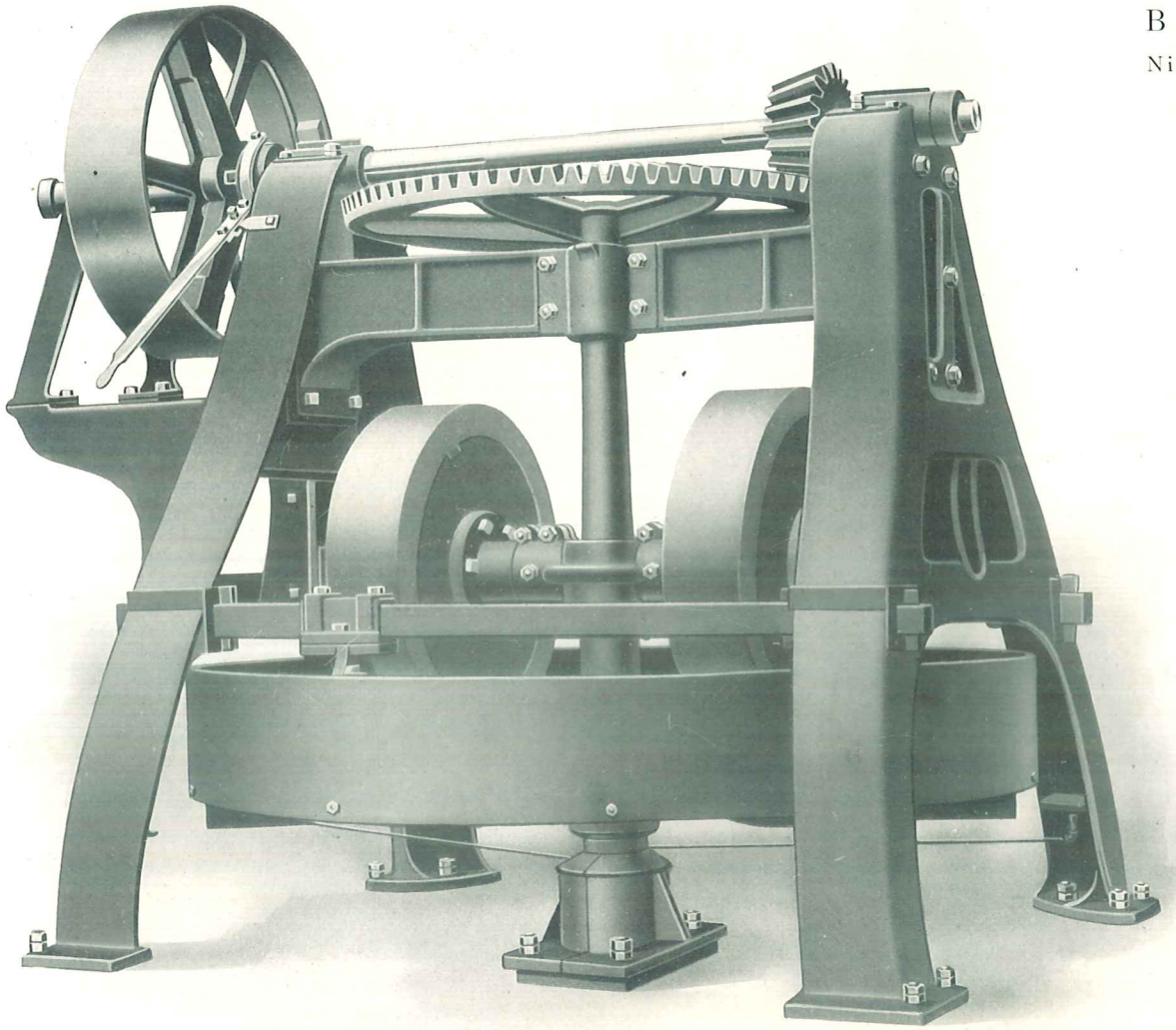
Canton Repress — Back View

DRY PAN

THE Dry Pan is adapted for reducing hard, stony clays, shales, etc., and has proven the most satisfactory and economical machine for this purpose. Our pans are made very heavy throughout, as the service required is oftentimes very severe. The housings of pan are inclined slightly toward each other and ends of cross pieces where they join housings are machined and securely bolted to the housings, which construction makes a very rigid frame. Pans have forged steel upright shaft with heavy shoulder for supporting the main bed plate or bottom. Bed plate casting is made very thick and heavily ribbed on the bottom. It is recessed on top around the outside to receive the wearing plates. The bed plate and arms are both machined where they join, and each arm is bolted to bed plate with three bolts. Removable liners are provided in the guide boxes in housings, in which the guides on ends of muller shafts move vertically. Step bearing consists of outer casing made in two pieces with machine joint and packed to hold oil. A polished chilled iron plate is placed in the bottom of casing and a smaller plate having socket to receive the end of vertical shaft forms the toe and revolves with the shaft. Between the two polished chilled plates is placed a phosphor bronze plate with suitable oil grooves. A closely fitting cover around the shaft makes the step dust-tight. Oil pipe from outside of pan leads to the step and makes an easy method of lubricating. Plows or scrapers are swiveled so that they can be adjusted to any desired positions.

These pans can be furnished in the following sizes: 5, 7, 8 and 9 feet. All pans are provided with friction clutch pulley for driving.



BONNOT

Nine-Foot Dry Pan

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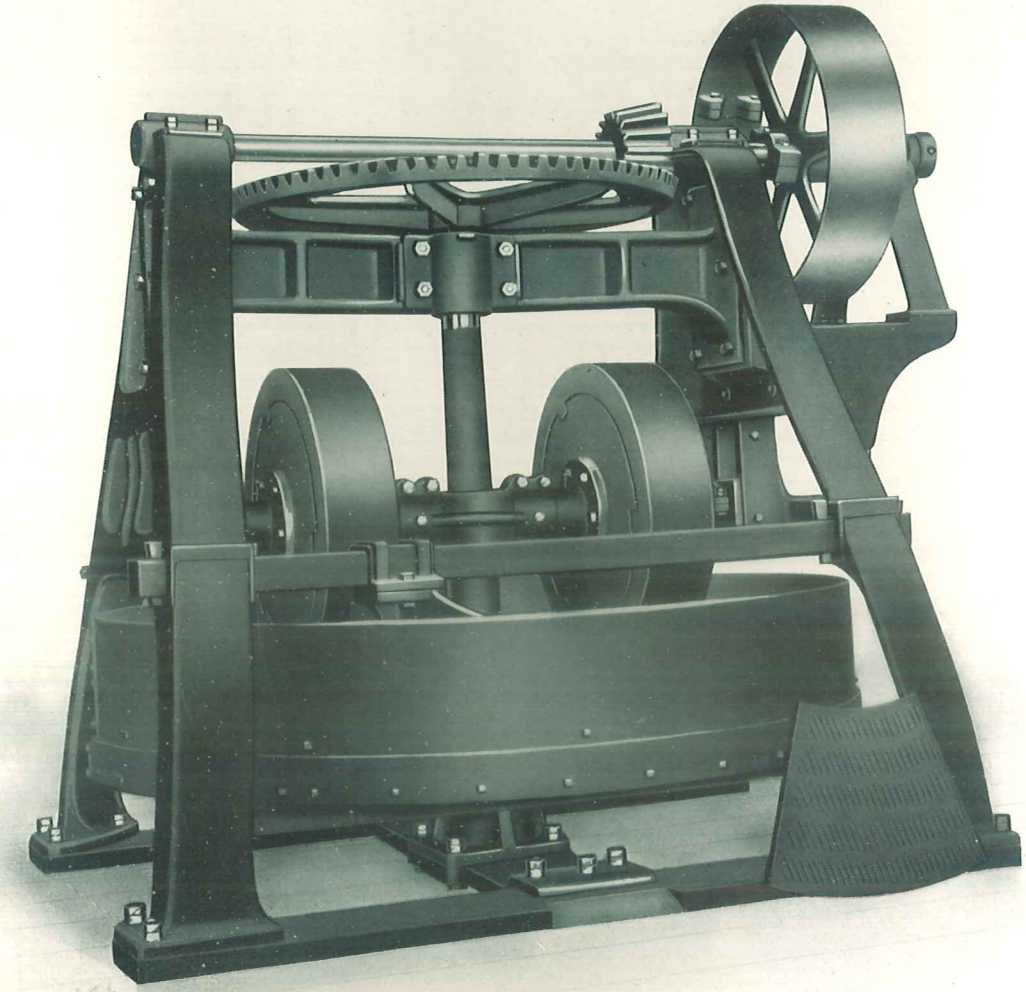
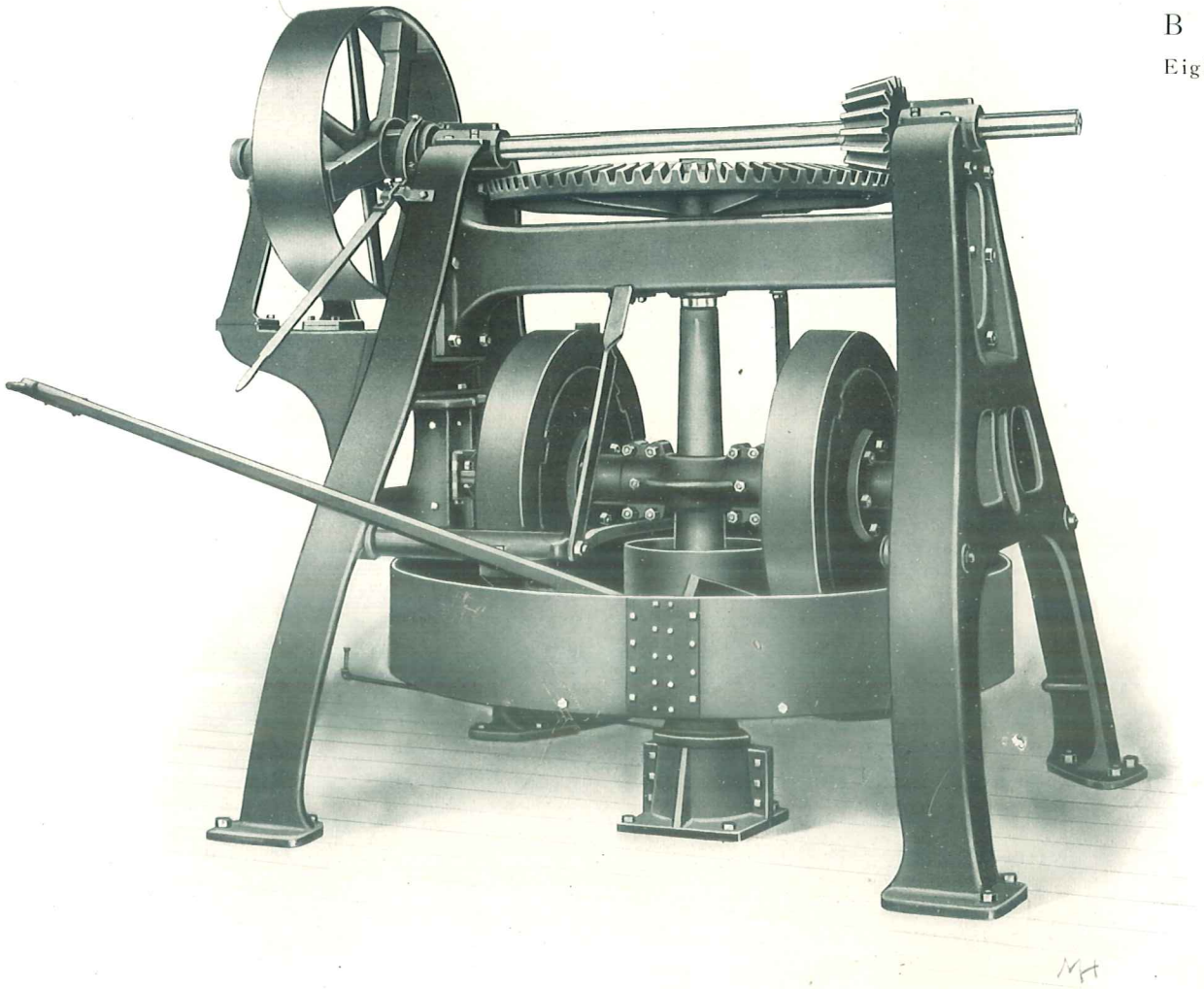
Nine-Foot Dry Pan with Sills and Iron False Bottom





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Eight-Foot Wet Pan

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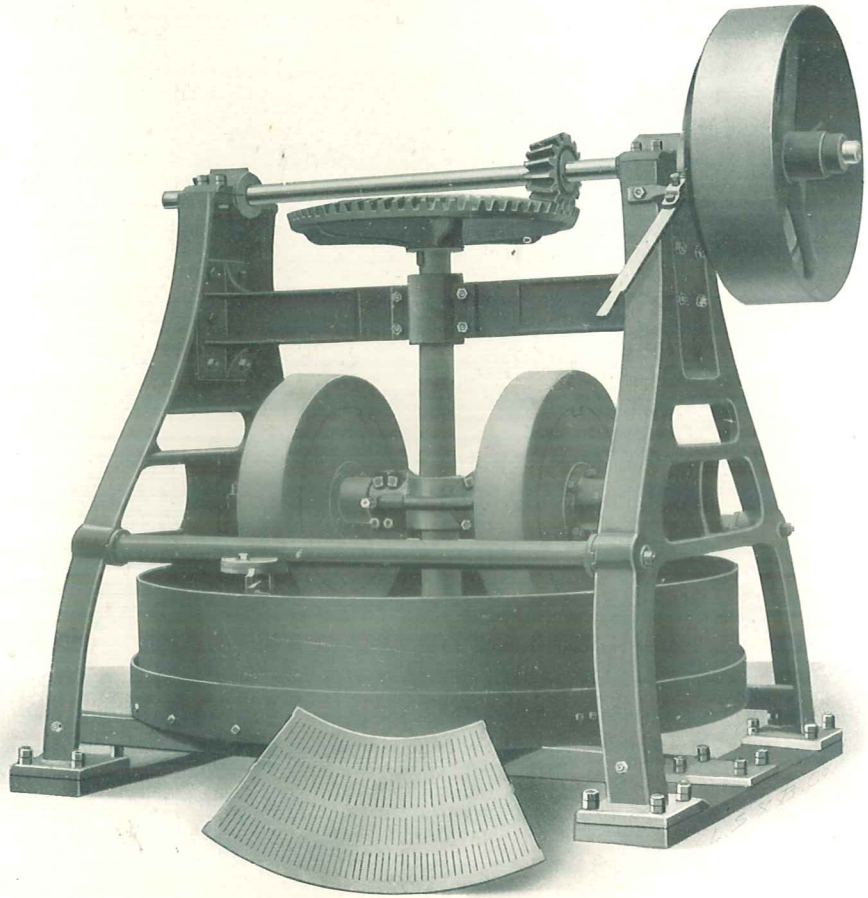
Seven-Foot Dry Pan



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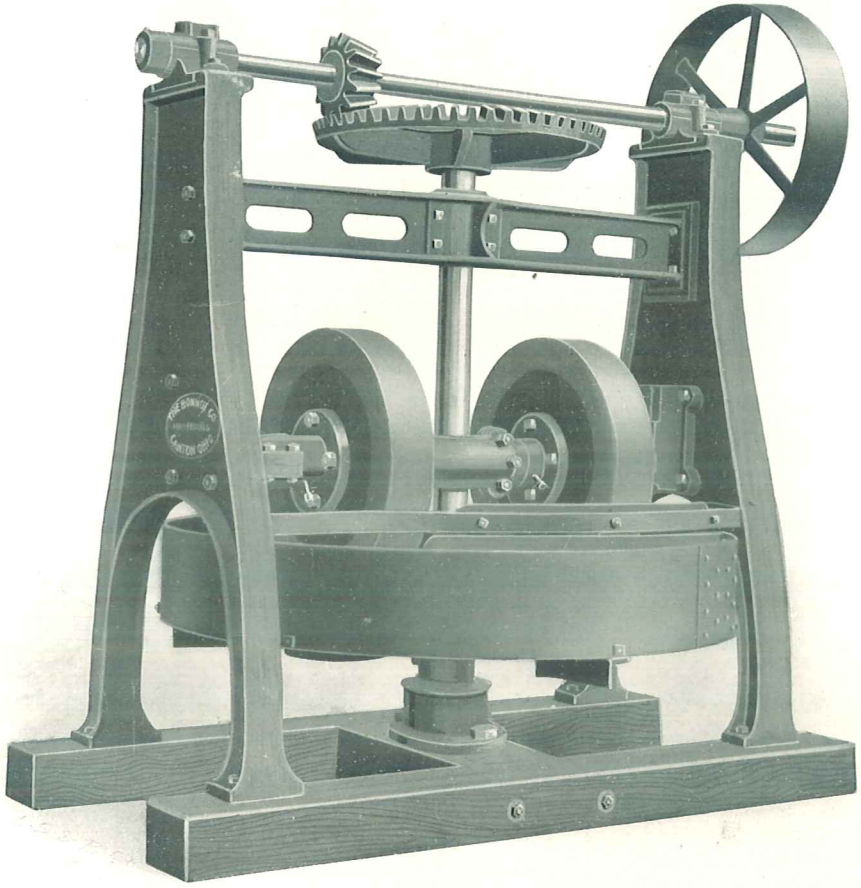
Five-Foot Dry Pan



"C" DOUBLE GEARED PUG MILL

OUR line of all-iron and steel Pug Mills is designed for hard, exacting duty and will give good service. The double-geared iron and steel Pug Mill is self-contained, having two 7-inch I-beams extending its entire length, inclusive of the outer bearing of the driving pulley. The main gear is 8-inch face, and intermediate gear 6-inch face. The main shaft is 4½ inches; intermediate shaft, 3½ inches; countershaft, 3 inches. The thrust on the main shaft is a marine thrust, located at end of shaft in main frame. The frame of mill is a solid casting of ample strength. Mill is equipped with interlocking hubs. With this construction the hubs or knives can be replaced independently of adjoining hubs or knives and without removing the shaft. All knives are made from a special mixture of hard iron, to give the greatest possible wear. The shell is of ¼-inch tank steel, heavily reinforced along top of shell with angle iron.

Friction clutch pulley 36 by 14 inches. Speed of pulley 275 R.P.M.

This mill can be made in any desired length up to 16 feet, but the standard size is 12 feet.

Dimensions of 12-foot mill: length, 19 feet 6 inches; width, 5 feet 4 inches; height, 3 feet 11 inches.

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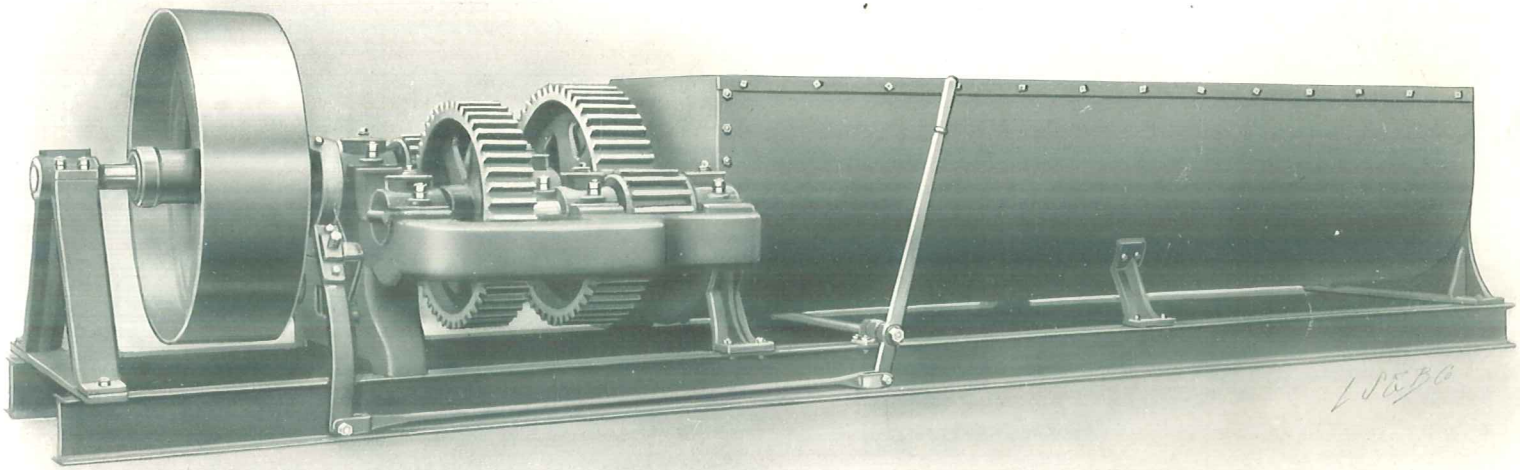
Double-Geared Pug Mill



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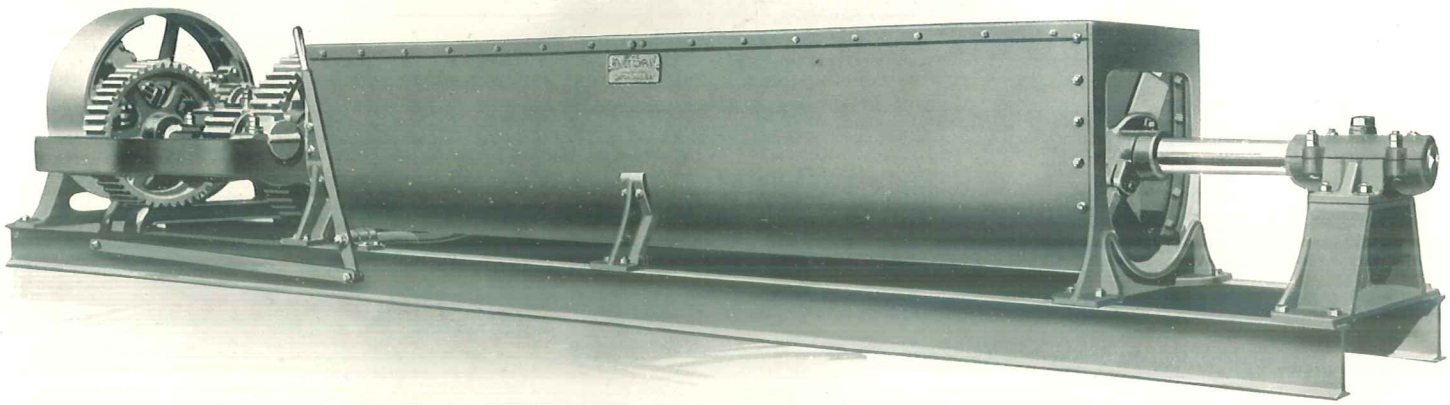
Open End Pug Mill



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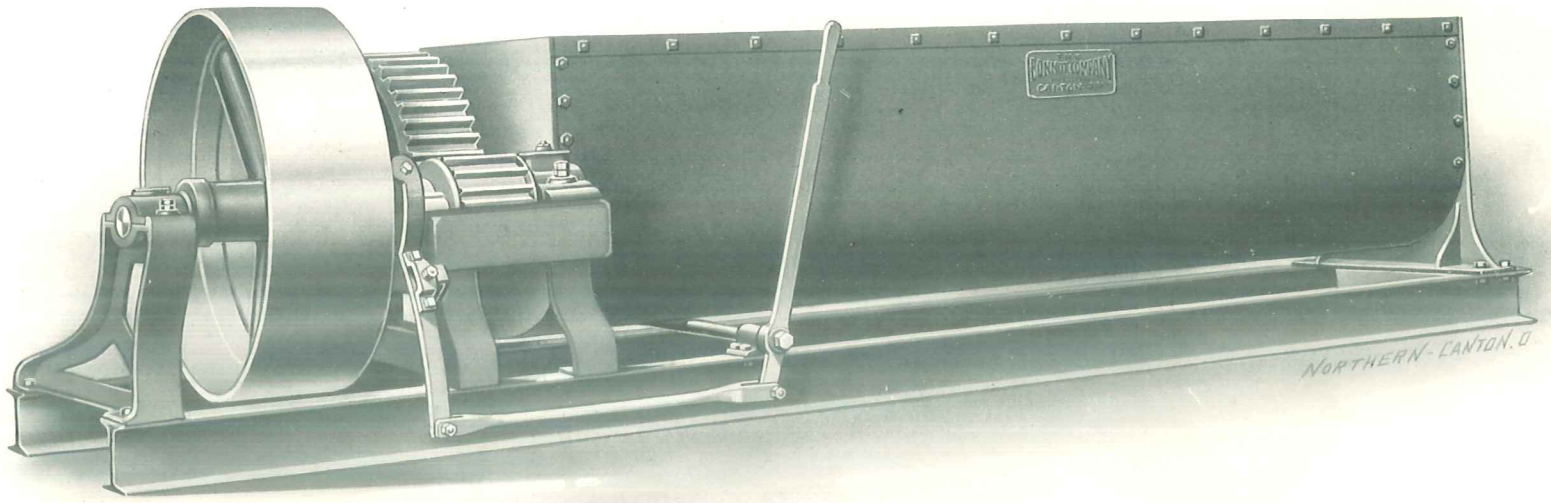
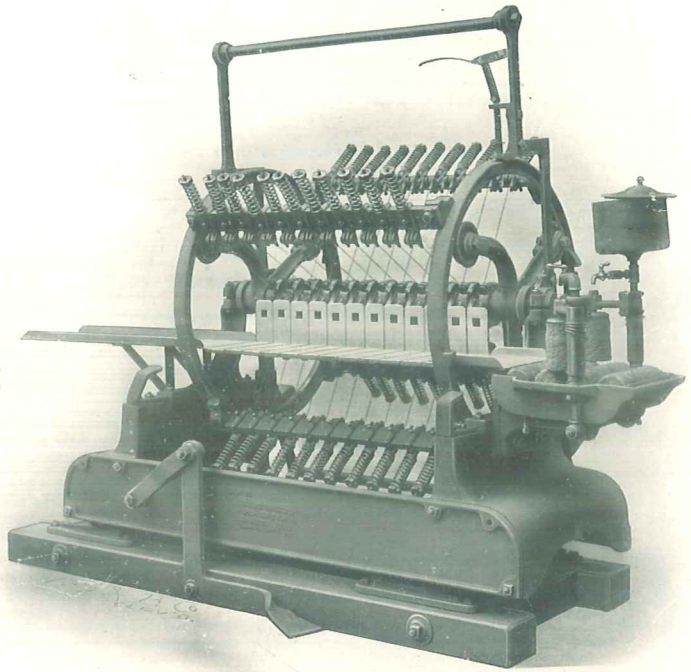
Single-Geared Pug Mill





Revolving Table for Side Cut Brick

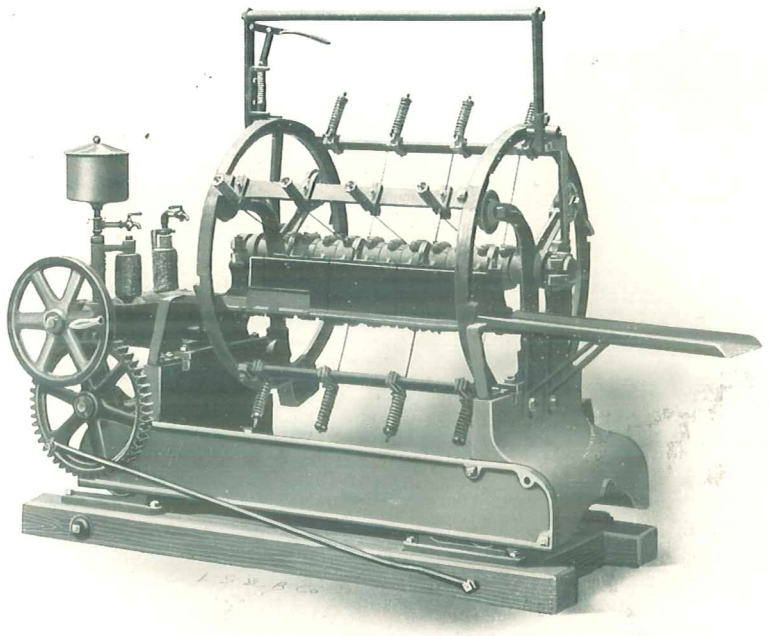
THE Revolving Table is particularly adapted to the making of the highest grade of fine front brick. It is arranged with downward movement of the cutting wires, which, together with the method of supporting the column, gives a very smooth edge on the brick. The machine has a substantial iron base, carrying cutting roll which contains four sets of wires. The cutting is done by a downward movement of the lever, and table is returned to position by means of foot treadle, making the movement of table comparatively easy. This table can only be furnished for belt delivery.

The platen and thrust bars are carefully fitted and securely held in position by means of countersunk bolts and dowel pin, which prevents their moving. Table is provided with our special wire fasteners and suitable lubricating device.

Revolving Table for End Cut Brick

OUR Revolving Table for side cut brick has proven so satisfactory that there has been a demand for a table of the same general design arranged for end cut brick. The same style of construction is used, and the end cut table can be supplied for cutting either single or double stream, as may be desired. The illustration shows the table with handwheel for returning to position after cutting. We can supply it with this device or with treadle, if preferred.

Where very smooth brick are desired, this table will be found to give the very best of satisfaction.



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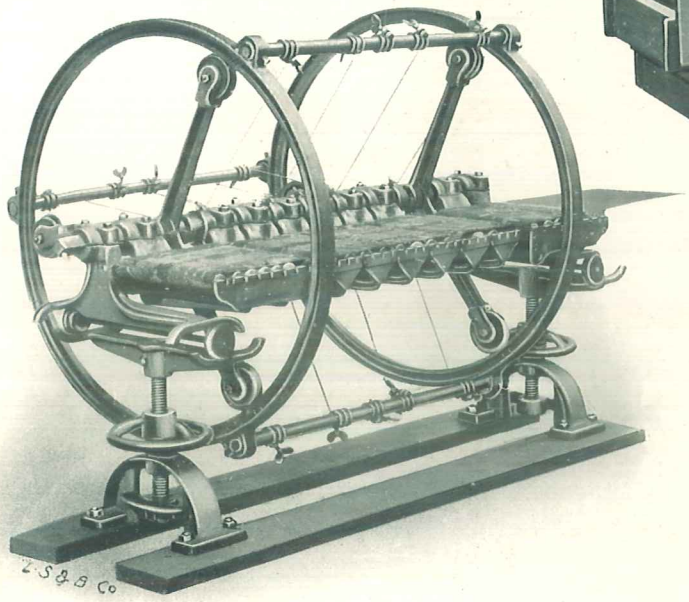
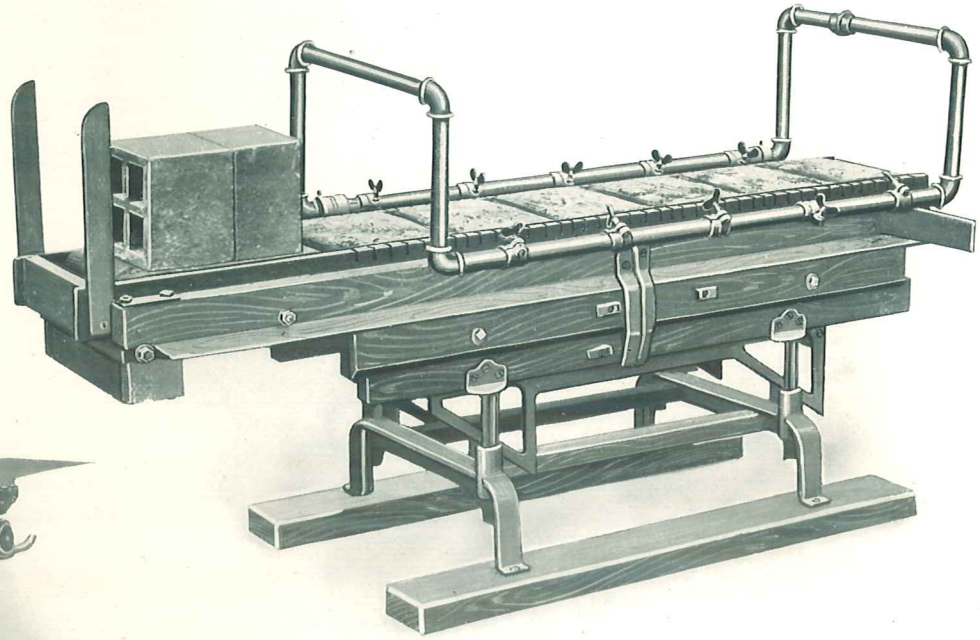
Hollow Block and Revolving Tile Cutting Tables



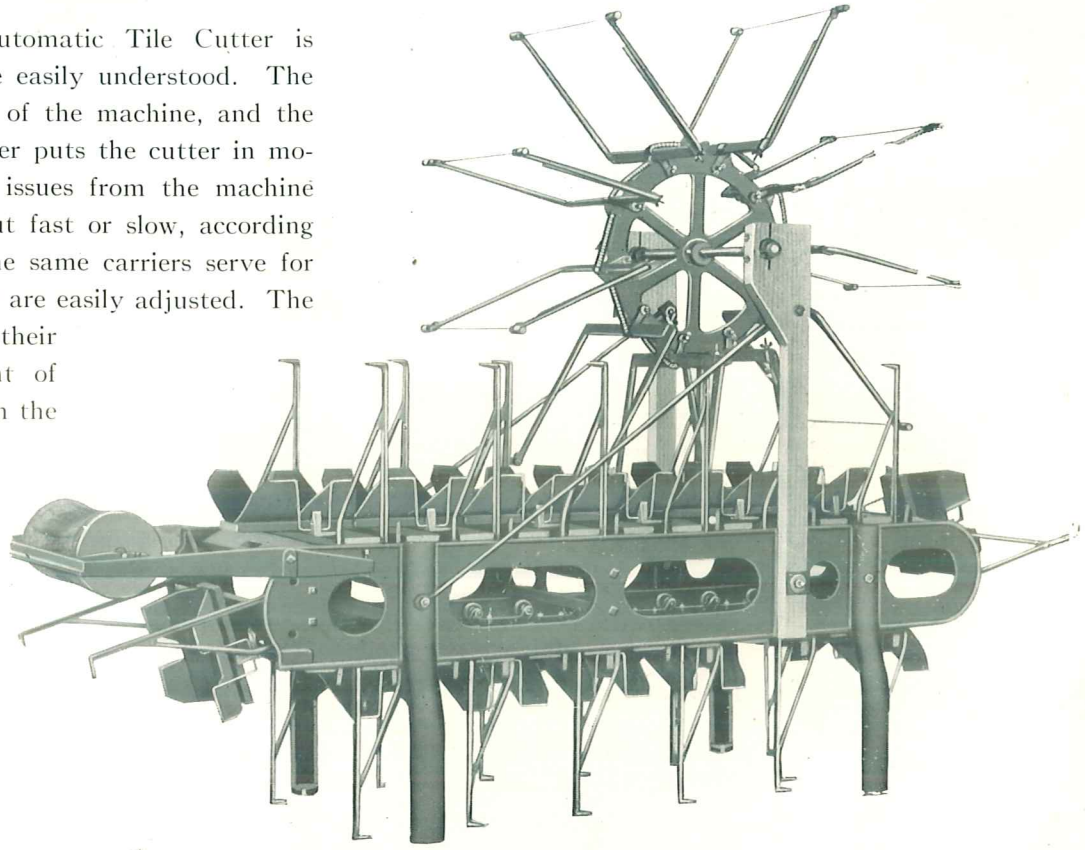
Revolving Tile Cutting Table



Hollow Block Table

Automatic Tile Cutter

THE construction of the Automatic Tile Cutter is extremely simple and will be easily understood. The cutter is placed squarely in front of the machine, and the friction of the clay upon the carrier puts the cutter in motion, and as long as the column issues from the machine the reel turns and the tile will cut fast or slow, according to the speed of the column. The same carriers serve for every size of tile up to 8-inch, and are easily adjusted. The arms of the reel are not fixed in their socket but have a given amount of play, and the points between which the cutting wires are stretched are provided with small rollers, which meet the iron guides on the carrier belt and carry the wires downward through the column. The tile carriers can be taken off by simply turning a button on the underside of each, and flat carriers for building blocks can be put on by the same means.



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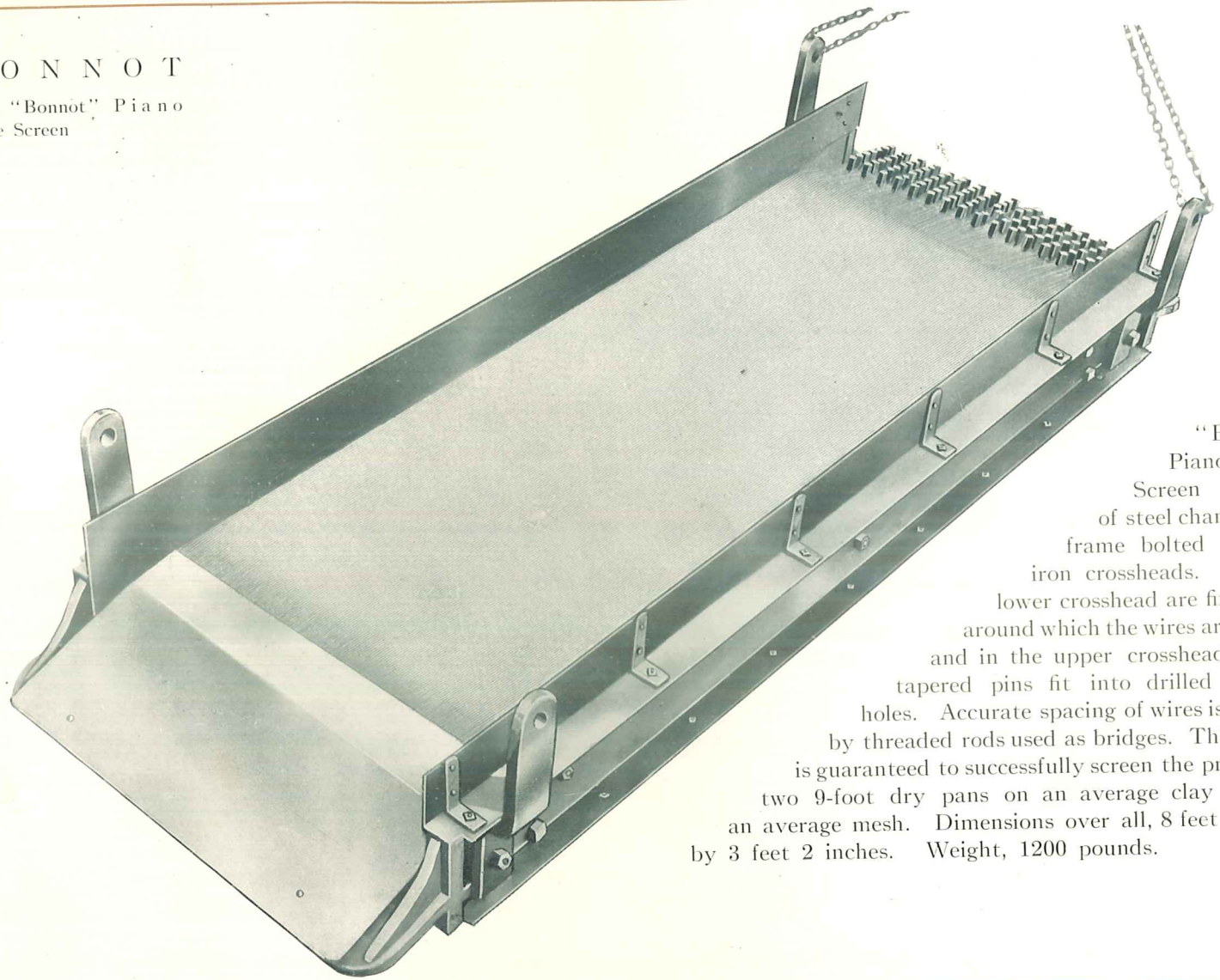
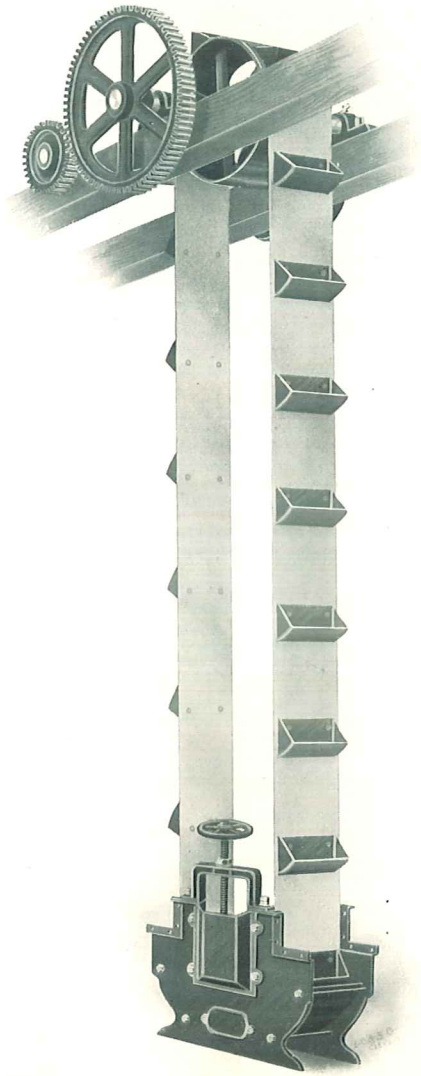
The "Bonnot" Piano Wire Screen

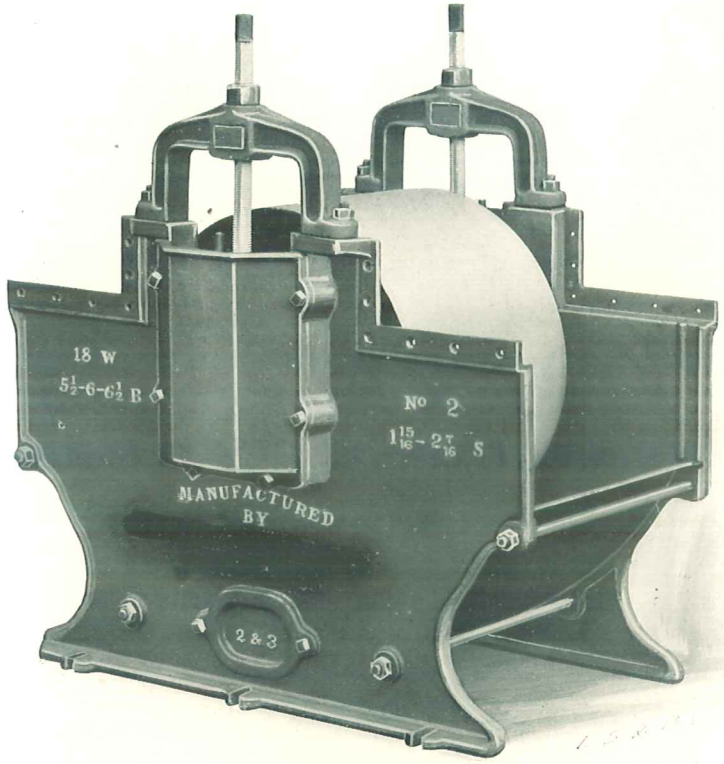


The "Bonnot" Piano Wire Screen consists of steel channel side frame bolted to cast iron crossheads. In the lower crosshead are fixed pins around which the wires are looped and in the upper crosshead turned tapered pins fit into drilled tapered holes. Accurate spacing of wires is secured by threaded rods used as bridges. This screen is guaranteed to successfully screen the product of two 9-foot dry pans on an average clay through an average mesh. Dimensions over all, 8 feet 8 inches by 3 feet 2 inches. Weight, 1200 pounds.

BONNOT

Elevator and Boot



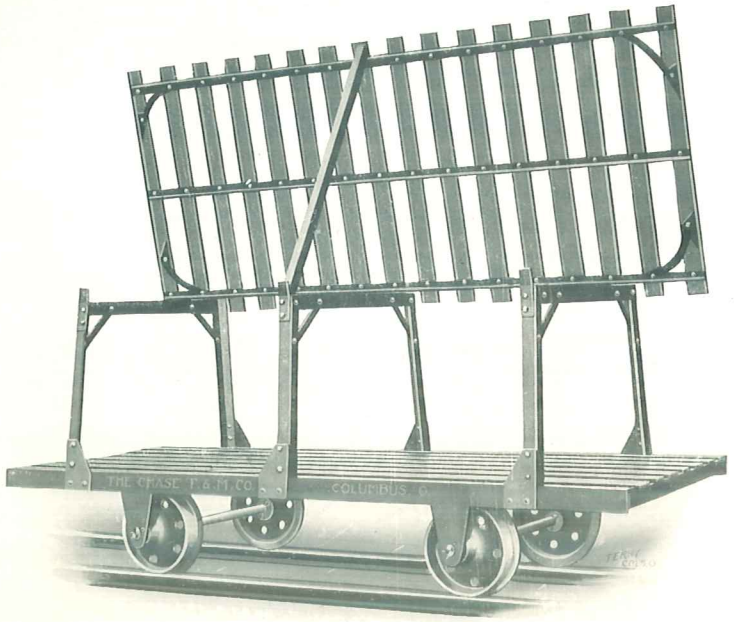


Dryer Cars

WE build a variety of steel and iron dryer cars, single or double deck. They are built to give good service, being substantially constructed and well braced. All cars have roller bearings.

No. 29 shows our flat top or single deck brick car of substantial construction. This car is 84 inches long, 34 inches wide, and 24-inch track gauge.

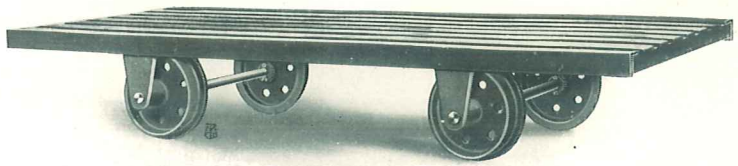
No. 30 is a roller bearing, double deck brick car, which is exceptionally easy running. In this car, as well as the No. 29, the roller bearing is placed in the hub of wheel instead of outside box. The slats on top deck can be run lengthwise or crosswise, to suit the purchaser. Length of car, 84 inches; width, 34 inches; track gauge, 24 inches; height, from top of rail to top of first deck, 12½ inches. Distance between decks, 20 inches.



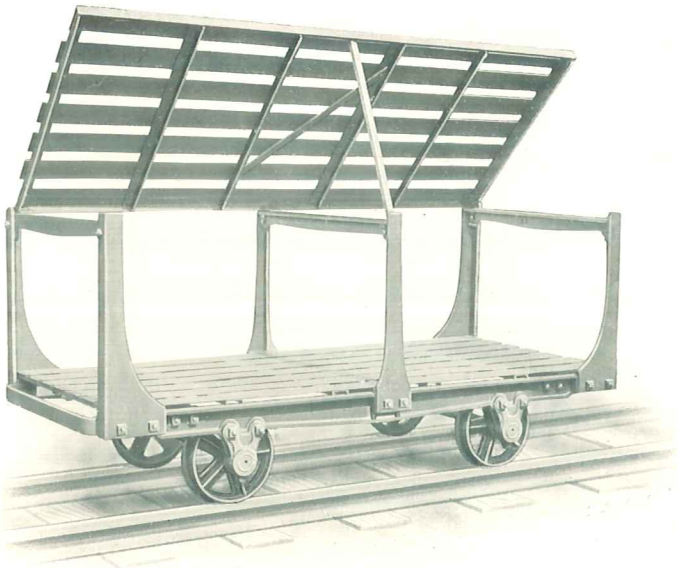
No. 30

No. 8 Car has heavy cast-iron uprights and steel decks. Decks are made with 3-inch or 3½ by ⅛-inch flat steel, riveted to 1½ by 1½-inch steel angle crosspieces. Distance between decks, 22 inches.

No. 10 Car has cast-iron side rails and uprights, with steel decks of same construction as No. 8. Length over all, 7 feet; width over all, 37 inches. Distance between decks, 22 inches.



No. 29

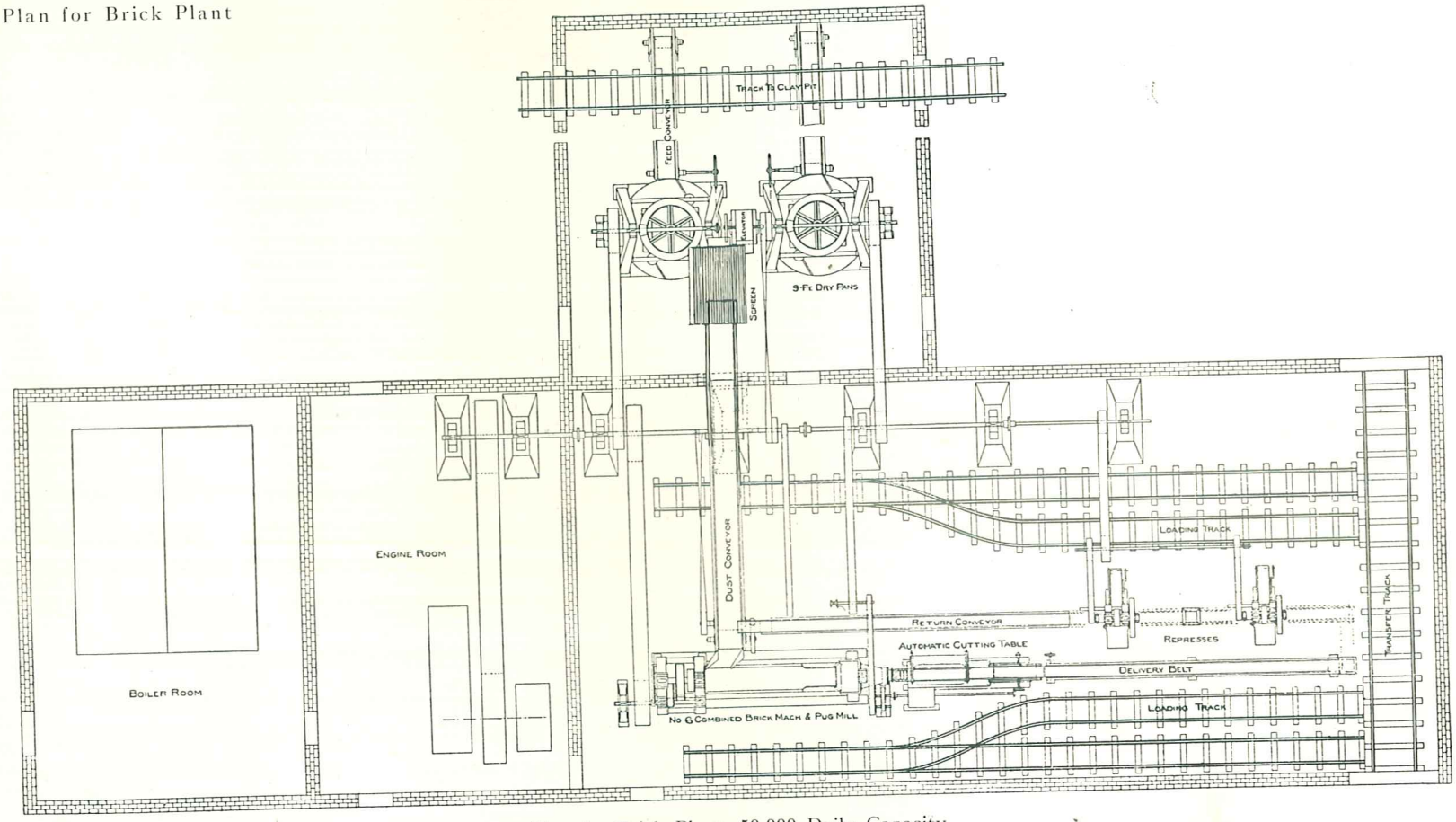


No. 8

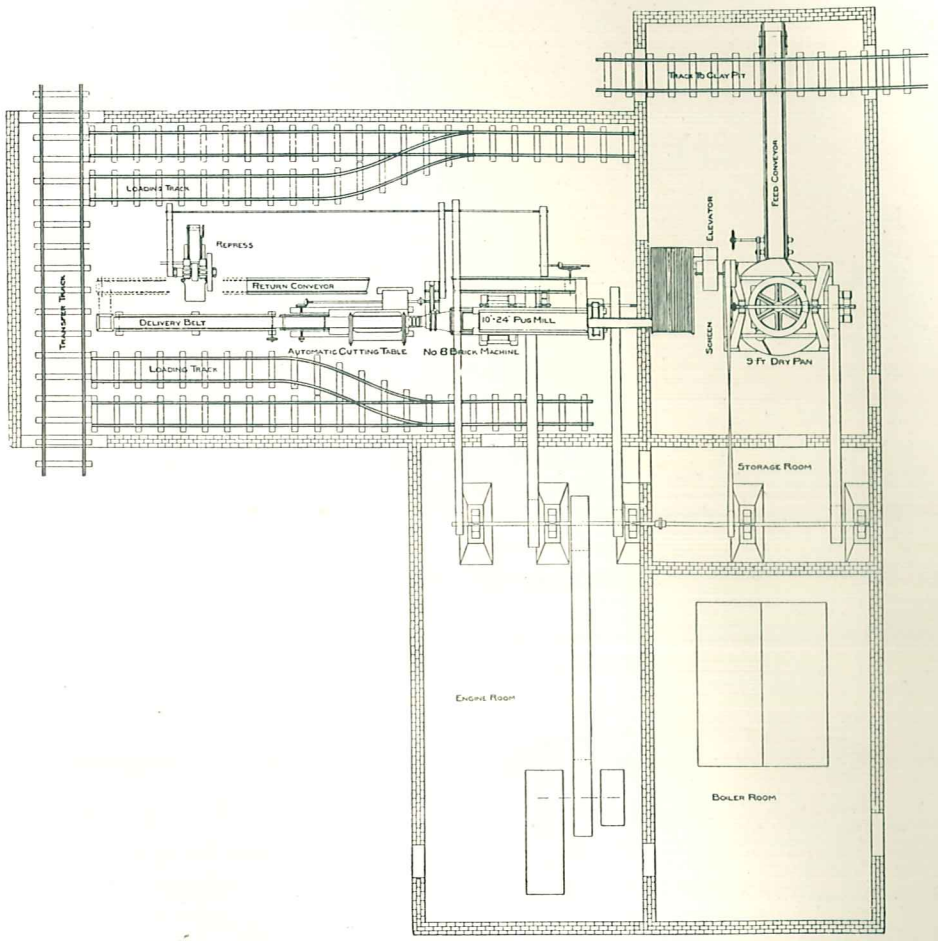
No. 10

BONNOT

Plan for Brick Plant



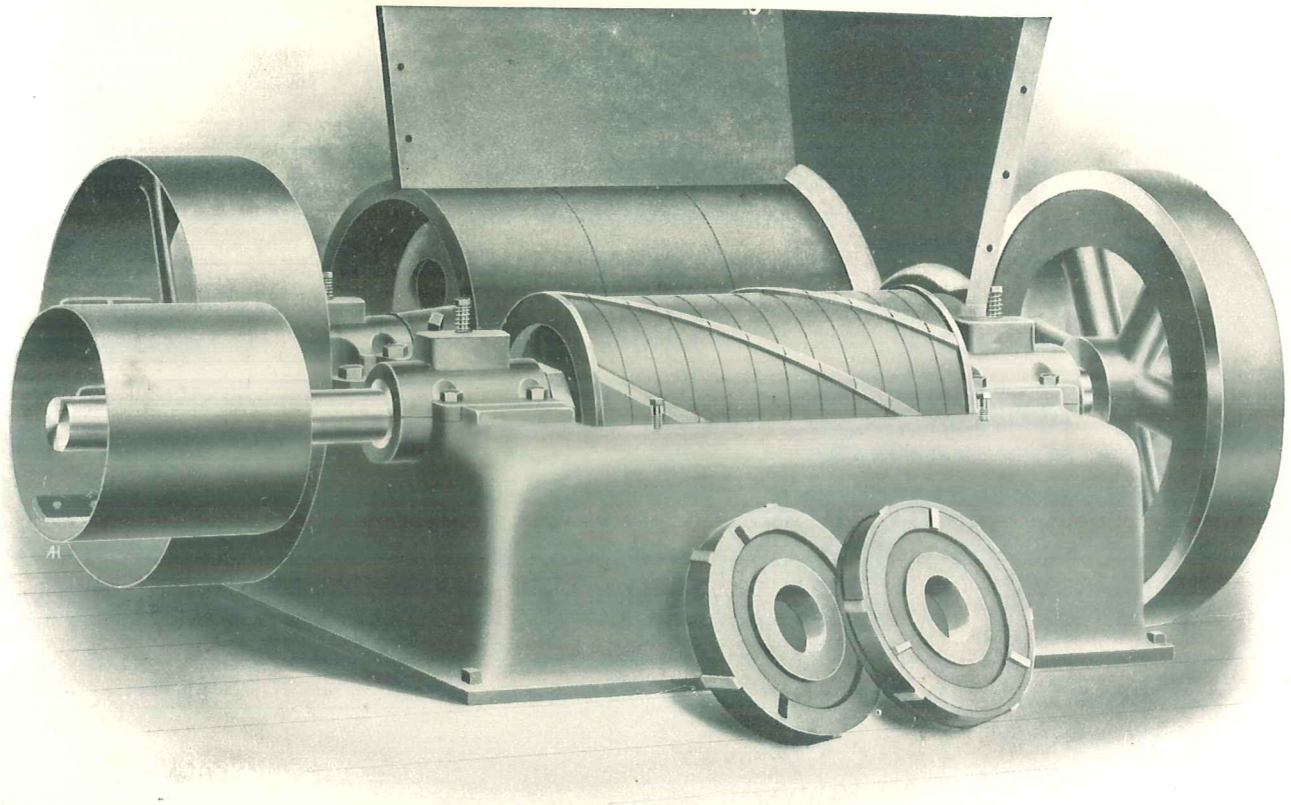
Plan for Brick Plant, 50,000 Daily Capacity



Plan for Brick Plant, 25,000 Daily Capacity

B O N N O T

Disintegrater



Paving Block and Brick made on Bonnot Machinery

The Caxton Company
Cleveland